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ABSTRACT

The Education Commission of the States (ECS) 1994 National Forum and Annual Meeting was used as an opportunity to host a special Asian/Pacific/North American Dialogue conference on education policy. The purpose of this meeting was to discuss how educational practice and innovation in the Asia-Pacific nations could inform education reform and economic-development efforts in the United States. Delegates expressed a common concern about the inability of current education systems to prepare students for a changing world. Almost all countries represented had established national education goals. Other important issues that received discussion included school-to-work transition, higher education, values and character development, teacher quality, and Japanese educational practices. Ten sections summarize current educational trends and practices in the following countries--Australia, Canada, Chinese Taipei, Hong Kong, Japan, New Zealand, the Pacific Islands, the Republic of Korea, the Republic of Singapore, and the United States. Contains a 35-item list of resources grouped by country and an audiotape order form. (LMI)

The Future of Education Policy
An Asian-Pacific/North American Dialogue

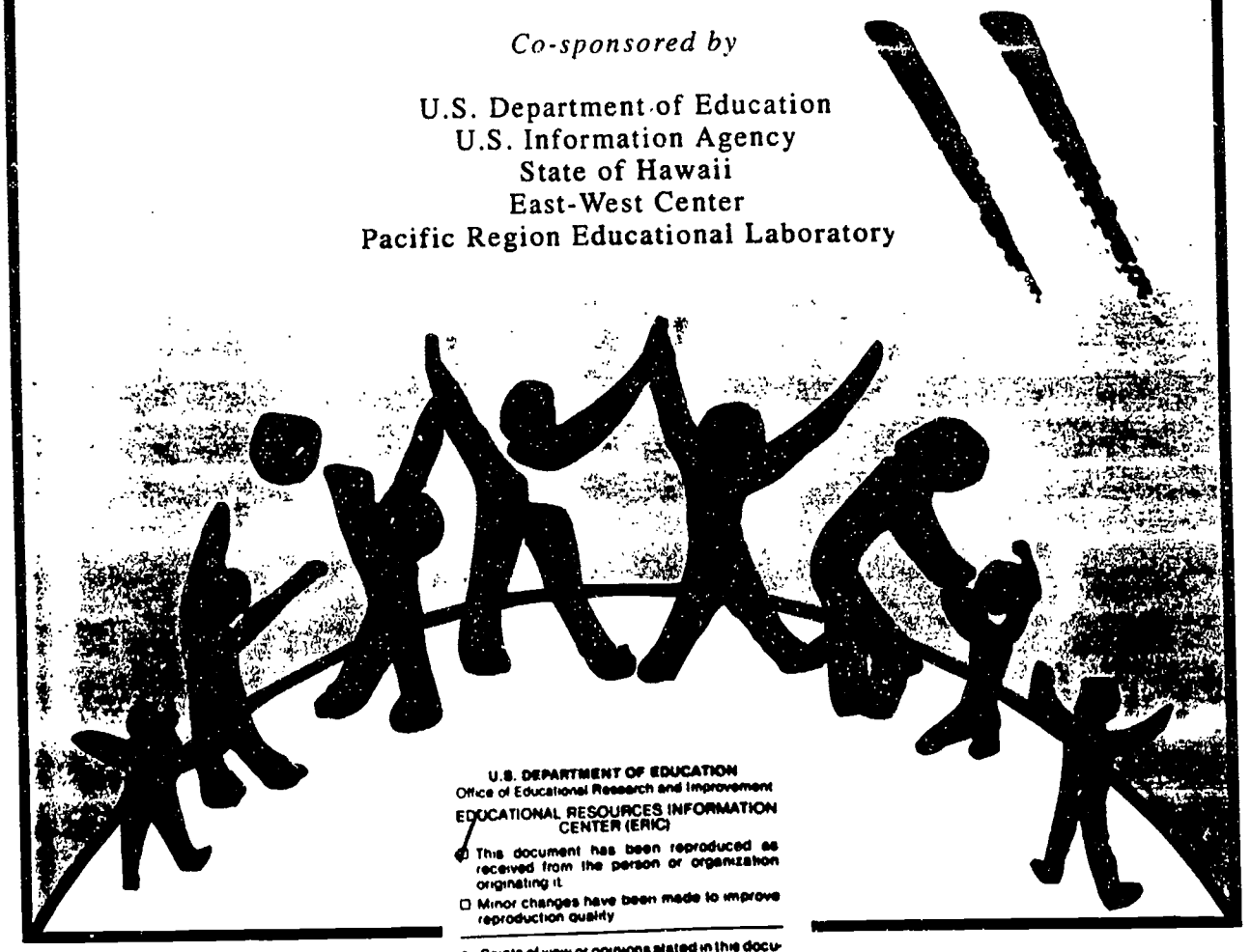
July 6-7, 1994, Honolulu

Sponsored by

Education Commission of the States

Co-sponsored by

U.S. Department of Education
U.S. Information Agency
State of Hawaii
East-West Center
Pacific Region Educational Laboratory



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of the States

September 1994

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Forty-nine states, the District of Columbia, American Samoa, Puerto Rico and the Virgin Islands are members. The ECS offices are at 707 17th Street, Suite 2700, Denver, Colorado 80202-3427.

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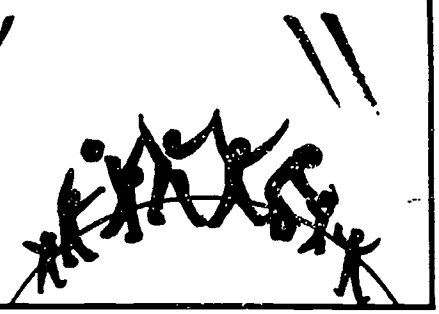

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CONTENTS

ECS VENTURES INTO INTERNATIONAL ARENA

*Calvin M. Frazier**

The 1994 ECS National Forum and Annual Meeting in Honolulu gave ECS an opportunity to do something it had never done before — host a special Asian-Pacific/North American conference on education policy. Delegations representing North America and the Asia-Pacific region were invited to join ECS National Forum attendees for two days of discussions about education issue and policy in the Asia-Pacific region.

High-ranking education and policy officials from Australia, Canada, Chinese Taipei, Hong Kong, Japan, New Zealand, Pacific Island nations, Singapore and South Korea attended to share information about education policy in their homelands and to compare notes with American participants. The event was co-sponsored by the U.S. Department of Education, State of Hawaii, East-West Center, U.S. Information Agency and Pacific Region Educational Laboratory.

Why did ECS, an organization of state leaders, decide to venture into the international arena? ECS leaders believed the central Pacific setting for the National Forum provided an excellent place for American policymakers to meet with leaders of some of the countries that have education systems which Americans often try to model. ECS wanted to provide an opportunity for these leaders to debate and discuss how educational practice and innovation in the Asia-Pacific nations can inform education reform and economic development efforts in the United States. In addition, many of the Asian-Pacific leaders were involved in the fall 1993 Asian-Pacific Economic Conference in Seattle; the ECS gathering offered a chance for them to meet solely on education matters and begin building relationships on something other than the economic theme.

Many people believe Asia's emphasis on education has led to the region's 6-8% a year economic growth, compared to around 2% for other nations. In addition, Asia is the largest market for U.S. goods and has three of the world's five billion people. To ignore Asia's impact on the United States, and the world, would be foolish.

Similarities Greater Than Differences

Over and over again, participants from both North America and the Asia-Pacific region expressed surprise at what they heard from other delegates. The surprise wasn't that they were doing things differently or had concerns different from their neighbor; it was that they all had so much in common. The image of a global community seemed very real.

The primary concern expressed by virtually all the delegates was the inability of current education systems to prepare students for a changing world. In addition, participants pointed to the influence of similar social dynamics at work in their countries. The family unit is seen as becoming more unstable. Divorce rates are rising. Marriage is being postponed until the mid-20s or later. Couples are having fewer children.

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*Frazier was ECS senior consultant for the Asian-Pacific/North American Dialogue.

In this context, education trends take on a sameness. Almost all the countries represented have established national education goals. Although the ends described in the United States' Goals 2000 are more specific than those adopted by the major Asia-Pacific countries, the concerns addressed are similar. Discussions of national assessment, education quality at all levels, student preparation for the workplace, and improvement of teacher and administrative preparation programs pointed to the similarity of delegates' experiences and concerns. All delegations felt driven by worldwide economic developments.

The Asian/Pacific-North American conference provided participants with much to think about. Some highlights follow.

School-to-work transition. How to prepare students for the workforce was one of the most highly discussed issues at the Asian/Pacific-North American Dialogue. Like Americans, the Asian-Pacific delegates believe education is the key to their countries' economic competitiveness. But even officials from countries Americans consider to have skilled workforces said their education systems are inadequate to train students for jobs that are becoming more high-tech or service-oriented.

Several Asian/Pacific delegates cited parents' desire to send their children to college as their major workforce problem, saying their universities do not have room for all who want to enroll and their workforces need more people trained in technical skills.

Higher Education. In contrast, the United States was seen as being blessed with space for students in college and university classrooms. Until recently, many Asian countries have focused resources on elementary and secondary schools to achieve basic compulsory education goals. This has meant postponing funding of higher education, resulting in limited access to higher education.

Values, Morals, Ethics and Character Development. While the United States is embroiled in local and state debates over values in the classroom, Chinese Taipei, New Zealand, Australia, Singapore, Korea and Japan have incorporated values into their national goals statements. The reason: traditional values are being lost, and leaders believe young people who lack a moral and ethical base threaten their nations' well-being. U.S. Secretary of Education Richard W. Riley, head of the U.S. delegation, added his views on values by telling participants: "We cannot have good education that is valueless." He said if high academic standards come first, solid values such as hard work will result.

Teacher Quality. Like the United States, Asian-Pacific countries are struggling with issues concerning professional development opportunities and adequate salaries for teachers. They, too, are dealing with questions of unionism, performance and the practice of drawing administrators from the teaching ranks.

Japanese Comparisons. The Japanese delegation enlightened the conference by speaking frankly about their country's education problems, as well as its gains. Envied for its 94% high school graduation rate and high level of student achievement, Japan, nevertheless, is reviewing and reforming some of its education practices. Japanese proposals for reducing the number of school days, emphasizing the individuality of students, reducing rigidity in the system and improving higher education were of high interest to conference participants.

In Closing

Much more information sharing took place informally during the Asian-Pacific/North American conference. The Canadian delegates not only played a major part in the meetings, but also took the

initiative to hold a pre-conference meeting with Riley and other U.S. leaders to explore grounds for a closer relationship in the coming years — a step needed for some time.

Not enough can be said for the image Riley provided for the U.S. delegation. He was accessible to the visiting delegates as well as to ECS participants. The secretary's participation throughout the conference had a positive effect on the conference, and ECS greatly appreciates his involvement.

Overall, the lasting impression from the conference is that international understanding should be a high priority for this country, and, in fact, all countries. Providing education leaders with the experiences necessary to understand and interpret these developments to students throughout the world's education systems provides a base for better decisionmaking in the future. ECS and all the conference participants are indebted to the nine delegations that came and shared with us in Honolulu.

This publication includes a variety of information to stimulate your thinking on how we can learn from the Asia-Pacific region. The information includes remarks made by delegation leaders at the ECS Asian-Pacific conference, a sketch of each country represented and details, where available, about each nation's education goals and reform efforts.

INTERNATIONAL DELEGATION MEMBERS

AUSTRALIA

Robert Carbines, General Manager, Quality Programmer, Directorate of School Education, Victoria
John T. McArthur,* Executive Secretary, Ministerial Council on Education, Employment, Training and Youth Affairs

Judi Forsyth, Deputy Executive Secretary, Ministerial Council on Education, Employment, Training and Youth Affairs

Bruce Wilson, Curriculum Manager, Curriculum Corporation

CANADA

Jacques Chagnon,* Chairman, Council of Ministers of Education of Canada; Education Minister of Quebec

Jill Hutcheon, Assistant Deputy Minister, Policy, Priorities and Curriculum Development, Ontario

John D.S. MacEachern, Minister of Education, Nova Scotia

Mary Meloshe, Director General, Department of Human Resources and Development, Quebec

Keith Milligan, Minister of Education and Human Resources, Prince Edward Island

Francis R. Whyte, Director General, Council of Ministers of Education of Canada

CHINESE TAIPEI

Yu Yuh-chao,* Director, Bureau of International Cultural and Educational Relations, Ministry of Education

Li Chen-ching, Director, Cultural Affairs, Coordination Council for North American Affairs, Washington, D.C.

Mao Lian-wen, Director, National Institute of Educational Resources and Researches

Wu Tieh-hsiung, President, National Tainan Teachers College

HONG KONG

Michael Leung,* CBE, JP, Secretary for Education and Manpower

Robert Lo, JP, Deputy Director of Education

Kevin Mak, JP, Deputy Secretary for Education and Manpower

JAPAN

Yukihiko Hishimura,* Director-General, National Institute for Educational Research

Kazuo Ishizaka, Head, Curriculum Research Division, National Institute for Educational Research

Norihiro Kuroda, Overseas Education Research Officer, Research and Statistics Planning Division, Minister's Secretariat, Ministry of Education, Science & Culture

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*Delegation leaders

Takanori Sakamoto, Senior Researcher, Department of Overall Planning and Coordination, National Institute for Educational Research

Hirofumi Takemoto, Director, Educational and Cultural Exchange Office, International Affairs Planning Division, Science and International Affairs Bureau, Ministry of Education, Science & Culture

NEW ZEALAND

Catherine Gibson, Group Manager Implementation, Ministry of Education

PACIFIC ISLANDS

Steve N. Umetaro,* Director, Bureau of Public Instruction, Ministry of Education, Republic of Palau

Kangichy Welle, Director of Education, Chuuk, Federated States of Micronesia

REPUBLIC OF KOREA

Jong-ha Han,* President, Korea Education Development Institute

Wang-bok Kim, Director, International Cooperation Division, Ministry of Education

REPUBLIC OF SINGAPORE

Lee Yock Suan,* Minister for Education

Ho Peng, Assistant Director of Humanities and Aesthetics, Curriculum Planning Division, Ministry of Education

John S.K. Yip, Director of Education, Ministry of Education

UNITED STATES

Richard Riley,* U.S. Secretary of Education

Shaila Aery, Maryland Secretary of Higher Education

Jaquelyn Belcher, President, Minneapolis Community College

Ernest Boyer, President, Carnegie Foundation for the Advancement of Teaching

David Longanecker, U.S. Assistant Secretary for Postsecondary Education

Juanita McDonald, California Assemblywoman

Frank Newman, President, Education Commission of the States

Michel Oksenberg, President, East-West Center

Norma Paulus, Oregon Superintendent of Public Instruction

Thomas W. Payzant, U.S. Assistant Secretary for Elementary and Secondary Education

Stanley Russ, Arkansas State Senator; ECS Vice Chairman

Tommy G. Thompson, Governor of Wisconsin

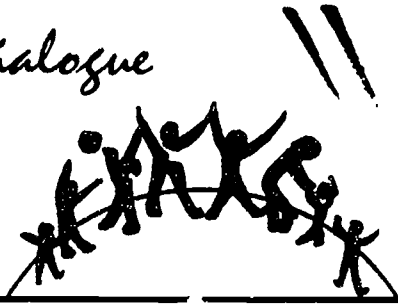
Joyce Tsunoda, Chancellor for Community Colleges, University of Hawaii

John Waihee, Governor of Hawaii

The Future of Education Policy: An Asian-Pacific/North American Dialogue

July 6-7, 1994

Final Program



The following three pages list the sessions that made up the Asian-Pacific/North American Dialogue. Tapes of these sessions are available. Please see the order form on page 83.

WEDNESDAY, JULY 6, 1994

Noon-1:30 p.m.
OPENING LUNCHEON
Kauai/Maui Rooms

Welcome and introduction: **John Waihee**, governor of *Hawaii*; ECS commissioner

Overview of National Forum: **Frank Newman**, ECS president

Keynote: **Richard W. Riley**, U.S. secretary of education

2 p.m.-4:30 p.m.
ASIAN-PACIFIC/NORTH AMERICAN DIALOGUE (Invited delegates only)
Royal Hawaiian Hotel, Regency Room

United Nations-style plenary discussion focusing on education assessment and standards, workforce preparation, economic development and education for a global citizenship.

2 p.m.-2:30 p.m. — Welcome and introduction of Asian-Pacific delegations

2:30 p.m.-3:15 p.m. — Discussion of national education goals

3:15 p.m.-4 p.m. — Discussion of workforce preparation

4 p.m.-4:30 p.m. — Discussion of possibilities for future international collaboration on education issues

Moderator: **Richard W. Riley**, U.S. secretary of education

THURSDAY, JULY 7, 1994

9 a.m.-10 a.m.
Concurrent General Session: EDUCATION GOALS AND PRIORITIES FOR THE COMING DECADE: Chinese Taipei, Republic of Korea, New Zealand and the Pacific Islands
Kauai Room

Delegation leaders will discuss progress toward achieving education goals and priorities and the obstacles they face.

Featured participants:

Catherine Gibson, Group Manager Implementation, Ministry of Education, *New Zealand*

Jong-ha Han, President, Korea Education Development Institute, *Republic of Korea*

Steve N. Umetaro, director, Bureau of Public Instruction, Ministry of Education, *Republic of Palau*

Yu Yuh-chao, director, Bureau of International Cultural and Educational Relations, Ministry of Education, *Chinese Taipei*

Moderator: **Michel Oksenberg**, president, East-West Center, *Hawaii*

9 a.m.-10 a.m.
Concurrent General Session: EDUCATION GOALS AND PRIORITIES FOR THE COMING DECADE: Australia, Hong Kong and Republic of Singapore
Maui Room

Delegation leaders will discuss progress toward achieving education goals and priorities and the obstacles they face.

Featured participants:

Lee Yock Suan, minister for education, *Republic of Singapore*

Michael Leung, CBE, JP, secretary for education and manpower, *Hong Kong*

John T. McArthur, executive secretary, Ministerial Council on Education, Employment, Training and Youth Affairs, *Australia*

Moderator: **John Waihee**, governor of *Hawaii*; ECS commissioner

NOTE: In the concurrent sessions following, delegates will give a brief perspective on the topic. Remaining time will be used for discussion.

10 a.m.-10:30 a.m.
BREAK
Ballroom Foyer

10:30 a.m.-Noon
Concurrent Session #321 EDUCATION AND ECONOMIC DEVELOPMENT
Kauai Room

As the Asia-Pacific and North America regions increase their economic connections, what does this mean for educational programs, professional and trade courses, and language training? The panel will consider policy implications of development, impact on expenditures and the need for increased Asian-Pacific awareness.

Featured participants:

Jacques Chagnon, chairman, Council of Ministers of Education of *Canada*; minister of education, Quebec

Wang-Bok Kim, director, International Cooperation Division, Ministry of Education, *Republic of Korea*

Lee Yock Suan, minister for education, *Republic of Singapore*

Moderator: **Tommy G. Thompson**, governor of *Wisconsin*

10:30 a.m.-Noon
Concurrent Session #322
This session has been cancelled.

10:30 a.m.-Noon
Concurrent Session #323
ACCREDITATION FOR QUALITY ASSURANCE: LOOKING TO THE FUTURE
Iao Needle/Akaka Falls Rooms

Nations accredit schools, programs and universities to provide quality assurance. With broader Asia-Pacific connections and worldwide exchanges of students and faculty, should there be international accreditation? Is the growing emphasis on results rather than credits accrued changing accreditation patterns?

Featured participants:

Michael Leung, CBE, JP, secretary for education and manpower, *Hong Kong*

Keith Milligan, minister of education and human resources, Prince Edward Island, *Canada*

Yu Yuh-chao, director of international and cultural relations, Ministry of Education, *Chinese Taipei*

Moderator: **Kenneth L. Perrin**, senior vice president, University of *Hawaii* System; chancellor, University of Hawaii at Hilo and University of Hawaii-West Oahu

10:30 a.m.-Noon
Concurrent Session #324
ACHIEVING NATIONAL GOALS
Kohala/Kona Rooms

Many education policy leaders are setting national goals and assessing progress toward meeting them. Has this trend made education more efficient and effective? Has it changed education expenditures or raised support for education? Are goals being achieved?

Featured participants:

Catherine Gibson, group manager implementation, Ministry of Education, *New Zealand*

Norihiro Kuroda, overseas education research officer, Research and Statistics Planning Division, Minister's Secretariat, Ministry of Education, Science & Culture, *Japan*

Bruce Wilson, curriculum manager, Curriculum Corporation, *Australia*

Moderator: **Thomas W. Payzant**, assistant U.S. secretary for elementary and secondary education, *District of Columbia*.

10:30 a.m.-Noon
Concurrent Session #325
EDUCATION STANDARDS AND ASSESSMENT
Honolulu Room

Testing, assessment and standard-setting have become a major part of education policymaking. Has learning improved because of this emphasis? What implications do standards and assessment have for instruction, textbooks and public confidence in education? What impact have assessment results had on expenditures for education?

Featured participants:

Robert Carbines, general manager, quality programmer, Directorate of School Education, Victoria, *Australia*

Ho Peng, assistant director, Ministry of Education, *Republic of Singapore*

Jill Hutcheon, assistant deputy minister, Policy, Priorities and Curriculum Development Division, *Ontario, Canada*

Kazuo Ishizaka, head, Curriculum Research Division, National Institute for Educational Research

Robert Lo, JP, deputy director of education, Ministry of Education, *Hong Kong*

Wu Tieh-hsiung, president, National Tainan Teachers College, *Chinese Taipei*

Moderator: **Theodore R. Sizer**, chairman, Coalition of Essential Schools, *Rhode Island*

10:30 a.m.-Noon
Concurrent Session #326
ACCESS TO HIGHER EDUCATION: SERVING LOW-INCOME AND MINORITY POPULATIONS
Kahuku Room

Because access to educational opportunities is related to economic development, postsecondary education is being made more available. How has the Asia-Pacific region met financial costs while expanding programs to meet education needs of low-income and minority populations?

Mary Meloshe, director general, Department of Human Resources and Development, Quebec, *Canada*

Steve Umetaro, director, Bureau of Public Schools, Ministry of Education, *Republic of Palau*

Moderator: **Jacquelyn M. Belcher**, president, Minneapolis Community College, *Minnesota*

10:30 a.m.-Noon
Concurrent Session #327
THE STATUS OF HIGHER EDUCATION: RESULTS FROM AN INTERNATIONAL STUDY
Lanai Room

Ernest L. Boyer and the Carnegie Foundation for the Advancement of Teaching have completed a 14-nation study of faculty perceptions of issues in higher education. The panel will discuss these opinions on the status of academic freedom, administrative leadership, public support and other issues.

Judy Forsyth, deputy executive secretary, Ministerial Council on Education, Employment, Training and Youth Affairs, *Australia*

Jong-ha Han, president, Korean Education Development Institute, *Republic of Korea*

Francis Whyte, director general, Council of Ministers of Education for *Canada*

Moderator: **Ernest L. Boyer**, president, The Carnegie Foundation for the Advancement of Teaching, *New Jersey*

10:30 a.m.-Noon
Concurrent Session #328
ASSESSING THE QUALITY OF HIGHER EDUCATION PROGRAMS AND STUDENT LEARNING
Waialua Room

As college costs have risen worldwide, students and other people have expressed concern about the quality of postsecondary programs. Some colleges have adopted new assessment practices formed by university students to monitor gains. What other trends are developing around quality?

Featured participants:

Li Chen-Ching, director of cultural affairs, Coordination Council for North American Affairs, Washington, D.C., *Chinese Taipei*

John T. McArthur, executive secretary, Ministerial Council on Education, Employment, Training and Youth Affairs, *Australia*

Moderator: **Russell Edgerton**, president, American Association for Higher Education, *District of Columbia*; ECS advisory commissioner

10:30 a.m.-Noon
Concurrent Session #329
EDUCATION REFORM IN THE PREPARATION OF TEACHERS AND ADMINISTRATORS
Waianae Room

With rapid change in education, education leaders and policymakers are realizing that staff development is critical to continued education progress. What new directions are emerging in the training of teachers and administrators? Do such training programs reflect reform priorities?

Featured participants:

John MacEachern, minister of education, *Nova Scotia, Canada*

Mao Lian-wen, director, National Institute of Educational Resources and Researches, *Chinese Taipei*

Kevin Mak, JP, deputy secretary for education and manpower, *Hong Kong*

Takanori Sakamoto, senior researcher, Department of Overall Planning and Coordination, National Institute for Educational Research, *Japan*

John S.K. Yip, director of education, Ministry of Education, *Republic of Singapore*

Moderator: **David G. Imig**, chief executive officer, American Association of Colleges for Teacher Education, *District of Columbia*; ECS advisory commissioner

12:30 p.m.-2 p.m.
Asian-Pacific/North American Dialogue Luncheon
EDUCATION GOALS AND PRIORITIES FOR THE COMING DECADE: Canada and Japan
Maui/Molokai Rooms

Delegates will discuss progress toward achieving education goals and priorities and the obstacles they face.

Featured participants:

Jacques Chagnon, chairman, Council of Ministers of Education of *Canada*; minister of education, *Quebec*;

Kazuo Ishizaka, head, Curriculum Research Division, National Institute for Educational Research, *Japan*

John T. McArthur, executive secretary, Ministerial Council on Education, Employment, Training and Youth Affairs, *Australia*

Moderator: **Michel Oksenberg**, president, East-West Center, *Hawaii*

2:30 p.m.-3:30 p.m.
General Session #360
ASIAN-PACIFIC/NORTH AMERICAN DIALOGUE CLOSING SESSION
Kauai/Maui Rooms

Summary remarks: **Richard W. Riley**, U.S. secretary of education. Riley will summarize events and discussions during the Asian/Pacific-North American Conference and discuss possible future international collaboration.

AUSTRALIA

PEOPLE

Population (1991 estimate): 17 million
Ethnic Groups: European 94%, Asian 5%, aboriginal 1%
Language: English; Education: Years compulsory — to age 15 except 16 in Tasmania. Literacy — 89%.
Work Force (1989), 8 million: Agriculture — 5%; mining, manufacturing and utilities — 19%; services — 72%; public administration and defense — 4%.

EDUCATION

Under the federal system of government in Australia, the six states and two territories are responsible for providing education services for their own residents. However, the Australian Constitution empowers the federal government to make special-purpose financial grants to the states for education in both government and private schools. The federal government is responsible for financing higher education.

GOVERNMENT

Democratic, federal-state system recognizing British monarch as sovereign.

ECONOMY

GDP (1990): $311 billion; Per-capita Income: $18,054.

Australia's modern economy has consisted of a diversified manufacturing/service sector dedicated to domestic requirements, coupled with export-oriented agricultural and mining sectors. In 1990, more than 67% of all Australian exports were primary agricultural and mining products. The manufacturing sector is limited by Australia's small domestic market and labor force and relatively high labor costs.

COLLABORATION PART OF AUSTRALIAN EFFORT

John T. McArthur
Executive Secretary
Ministerial Council on Education, Employment, Training and Youth Affairs

I'd like to start by making some contextual remarks about Australia, so you can understand where our goals and priorities fit in. Probably it's easier for me to make comparisons with the USA, partly because the land area of Australia is very similar to that of the continental USA, about three million square miles; however, we only have a population of 18 million, the same as Texas.

We have many similarities with the USA and my good friend Frank Newman tells me we even speak a similar language. We've been undergoing very similar educational changes to the USA in the past decade, and probably the most significant feature is the collaborative work that's been going on between the states and territories and the federal government. A major difference between my council and that of Canada and the USA is that the federal government is, in fact, an active member and participant in the council.

There are, of course, other differences. We have eight states and territories and about three million school children in elementary and secondary level. Traditionally, though, our system of education has been much more centralized — statewide staffing, allocation of funds to schools. There has been a recent move to devolution to the local level, in fact, even to the level in some states of appointment of teachers at the local school level.

Probably the major significant difference is in the revenue raising and expenditure of public funds role of the federal government. A term we use in Australia is "vertical fiscal imbalance." In real words, that means that the federal government raises much more money than it actually has the constitutional responsibility for spending, probably about 60% more than it has the right to spend. This came about as a wartime measure when total income taxing power was given to the federal government, so the states receive their money back for services such as health and education as a reimbursement from the federal government.

There are two problems with that. First is that they don't always get back as much as was given. It's not on a population base. And second, the federal government obviously having got the funds can retain some of that money to spend as it wishes.

"Traditionally, though, our system of education has been much more centralized — statewide staffing, allocation of funds to schools. There has been a recent move to devolution to the local level, in fact, even to the level in some states of appointment of teachers at the local school level."

John T. McArthur

We have another major difference in education at the school level between us and the USA, that is, we have a very large private-school sector: about 30% of our elementary and secondary school enrollment is in non-government schools. Funding of government schools is 90% by the state governments with reimbursed funds, 10% from the federal government. The federal government provides a lot of money to the non-government sector for capital and recurrent funding.

The second level of education at the post-compulsory area in vocational education and training is partly funded by the federal government, partly by the state government. The higher education or four-year college sector (university sector) is almost totally funded by the federal government.

Goals and priorities

Now I will outline Australia's education goals and priorities for the next decade, beginning with elementary and secondary schooling which is compulsory to year 10, about the age of 15-16.

- First, continue collaborative work on developing curriculum statements and profiles to meet the national goals of schooling.
- Second, implement national equity and access strategies to raise the educational outcomes of disadvantaged groups of students.
- Third, achieve the national targets of a minimum of 12 years of education or training for all 19-year-olds by the year 2000, including preparation for the world of work.
- Fourth, place a greater emphasis on languages other than English, in particular, Asian languages. The four priority languages that have been chosen are standard modern Chinese, Japanese, Indonesian and Korean, with a target of doubling the number of students in year 12 studying a language other than English to 25% by the year 2006.
- Fifth, at the school level, incorporate Asian studies into the mainstream curriculum.
- And finally, implement early intervention strategies in literacy at the elementary school level.

At the next level, senior secondary and vocational education training, most of the goals refer to reforms in vocational education, particularly developing a responsiveness to industry concerns about the content and relevance of training; tailoring this training in cooperation with industry; offering a variety of pathways in training, including schools, technical and further education and industry; focusing on what individuals can do as a result of their training rather than how long they spend in the system; and integrating employment-related key competencies into the curriculum of senior secondary and vocational education and training.

At the higher education or four-year college level, we have the following goals:

- As a long-term and bipartisan goal, providing university-level education to all who can benefit from it at some point in their lives.
- Improving access to university education to groups which traditionally have not been represented in that sector in Australia.
- Fostering partnerships among universities and government agencies, industry and vocational education and training.
- Strengthening the research infrastructure of Australian universities, in particular with industry.
- Promoting international links, especially in the Asia-Pacific area, including student placements, staff exchange and pooling of research and knowledge.
- And finally, facilitating with the schools and vocational education and training sector optimum articulation, including credit transfer arrangements where appropriate, to recognize prior learning and experience that new students bring with them.

"The second level of education at the post-compulsory area in vocational education and training is partly funded by the federal government, partly by the state government. The higher education or four-year college sector (university sector) is almost totally funded by the federal government."

John T. McArthur

AUSTRALIA: COMMON AND AGREED NATIONAL GOALS FOR SCHOOLING ENDORSED BY EDUCATION MINISTERS IN 1989

1. To provide an excellent education for all young people.
2. To enable all students to achieve high standards, optimism, high self-esteem and respect for others.
3. To promote equality of educational opportunities.
4. To provide students with skills which will allow them maximum flexibility and adaptability in their future employment and other aspects of life.
5. To provide a foundation for further education and training, including positive attitudes for lifelong education.

6. To develop in students:
   - Skills in English literacy
   - Skills in numeracy and other mathematical skills
   - Skills in analysis and problem-solving
   - Skills in information-processing and computing
   - An understanding of the role of science and technology in society, and skills in those areas
   - A knowledge and appreciation of, and confidence to participate in, the creative arts
   - An understanding of the need for balanced development of the global environment
   - A capacity to exercise judgment of morality, ethics and social justice.

> ***"Probably the most significant feature of Australia's [education reform] efforts is the collaborative work that's been going on among the states and territories and the federal government."***
>
> **John T. McArthur**

7. To develop knowledge, skills, attitudes and values which will enable students to be active and informed citizens.

8. To provide students with an understanding of and respect for our cultural heritage and other cultures.

9. To provide for the physical development and personal health and fitness of students, and for the creative use of leisure time.

10. To provide appropriate career education and knowledge of the world of work and its place in our society.

CANADA

PEOPLE

Population (1989): 26.2 million
Ethnic Groups: British 25%, French 24%, other European 16%, indigenous Indian and Eskimo 1.5%, mixed background 28%.
Languages: English, French; Education: 98% of population age 15 and over have at least 9th-grade education.
Work Force (13.3 million 1988): Agriculture — 0.4 million; manufacturing — 2.1 million; trade — 2.2 million; community/business/personal service — 4.1 million; public administration — 0.8 million.

GOVERNMENT

Confederation with parliamentary democracy.

ECONOMY

GDP (1990): US$554.1 billion;
Per-capita Income (1990): US$21,000.

Canada ranks seventh in the world in gross domestic product and first in the world in mineral exports. It is the world's largest producer of zinc, potash, uranium and nickel and is a major producer and exporter of energy.

GOALS FOR EDUCATION FOR THE NEXT DECADE

Jacques Chagnon
Minister of Education, Quebec
Chairman, Council of Ministers of Education of Canada

There is no doubt that collaboration, even at the level of sharing information, is key to coping with the rapid changes and diminishing resources in North America for education. We have to be truly inspired today to achieve the goals we set for our systems of learning. I am confident that this dialogue will help us identify new ways to work together to the benefit of the students we serve.

I would like to take this opportunity to speak about the goals that we have set for ourselves in Canada as we look ahead to the next decade.

In Canada, the provincial and territorial governments have exclusive constitutional responsibility for education. Although there are differences between provinces, regions and communities in Canada, common expectations of education favor a pan-Canadian approach in certain areas.

Canadians demand quality, efficiency and relevance in educational programs and services at all levels. My colleagues and I on the Council of Ministers of Education are committed to sharing resources, monitoring best practices, establishing common services and developing common instruments. Our goal is fair and equitable opportunity for all Canadians, whatever their educational and training objectives may be.

The efforts of the ministers of education are focused on ensuring quality, accessibility, accountability and mobility across the education spectrum. Innovation is required in each area. Let me outline some of the challenges of improving access and accountability.

Accessibility

Free access to elementary and secondary public schools is a guarantee in Canada. More recently, Canadians have come to expect the same opportunity with respect to higher education. A full 43% of Canadians over age 15 have studied at the postsecondary level or possess a university degree. This is a significant accomplishment. It is also an incentive to do more to extend access to higher education.

"There is no doubt that collaboration, even at the level of sharing information, is key to coping with the rapid changes and diminishing resources in North America for education."

Jacques Chagnon

I believe the answer lies in new and innovative approaches to social and employment-related policies and to organizational structures. Universities and colleges must become more flexible in offering part-time courses and programs and, especially, job-related training and retraining. Harmonization between secondary schools and the postsecondary institutions must be improved. The portability of credits is still another issue we must address with postsecondary institutions. As you know, mobility is often a condition of employment, and institutional regulations must not obstruct access to the world of work.

In May 1994, the Council of Ministers held its first national consultation on education. We asked stakeholders from across Canada for help in identifying common priorities for action in the area of accessibility. By every account, the consultation was successful. There is renewed commitment to making our institutions as user-friendly as possible.

Access to academic success

But we have a parallel obligation, namely, to improve "access to academic success." At the postsecondary level, it would help to have clearer admission criteria for diploma or degree programs, broader recognition of secondary school vocation and technical programs, and teaching practices that inspire academic achievement.

A further task is to devise a means of evaluating, for credit purposes, learning that has been acquired in the workplace or through other experiences. Some provinces have already developed methods to assess prior learning.

The accessibility issue is complex. There is remarkable technology available to solve some of the problems. The Council of Ministers is taking inventory of different policies and practices across the country in the area of open learning and distance education. Armed with information, we hope to move this item ahead quickly on our national plan of action.

Accountability

Governments in Canada are keenly aware of their fiscal responsibility and of the economic restraints we face. In education, provincial and territorial governments are seeking creative routes to controlling costs. "Creativity" is becoming more and more important since we have fewer dollars than ever to meet competing domestic and international demands. The global marketplace requires Canadians with a broad base of knowledge and specific skills. Moreover, accountability for the quality of education is a responsibility that must be shared by teachers, parents, administrators and students.

Governments' responses

Leadership with respect to accountability has been shown in several ways. Some provincial and territorial governments have consolidated the education, employment and training portfolios in one ministry. Others are developing different measures to recognize the important link between education and economic renewal and development.

Some provinces have integrated government social services in order to respond to important social problems with a broader range of options. Various models for partnerships with social services providers, businesses and community agencies are being tested to allow elementary schools to offer nutrition, health and child-care programs.

Collaboration in examining curriculum comparability and the potential for joint initiatives in curriculum development is a final illustration of both innovation and cost-sharing among provinces. The Council of Ministers of Education supports two interprovincial teams working toward broader cooperation in this critical area.

Concluding comments

I am aware that many of the issues facing education in Canada are also faced by your countries and others around the world. As those responsible for education, we can explore coordinated responses and devise common strategies to deal with similar problems.

Each individual must be allowed the opportunity to acquire the fundamental knowledge, skills and attitudes needed to make a meaningful contribution both at home and as citizens of the world, and I believe cooperation and dialogue will help ensure that we provide the best education possible to young and adult students.

CANADA: OUTLINE OF THE EDUCATION SYSTEMS

Council of Ministers of Education of Canada

Historical Context

Canada is comprised of 10 provinces and two territories. The constitution provides for a federative system in which legislative, executive and judicial powers are shared or distributed between the federal government and the governments of the provinces. The *Constitution Act, 1867* provides in part that "in and for each province, the legislature may exclusively make laws in relation to education." Each of the provinces and territories has developed its own educational structures and institutions and, while similar to one another in many ways, they reflect the circumstances of regions separated by great distances and the diversity of the country's historical and cultural heritage.

New Directions in Policy (Priority, Objectives, Goals)

Over the last several years, changes and innovations in educational planning and delivery have been a major focus for review, reform and renewal in Canada. Most notably, several provinces have conducted major reviews of public education and are in the process of placing the findings and new policy directions in their changing provincial contexts. A cross-section of change and innovation initiatives includes the following:

- In Prince Edward Island, an eight-member Educational Task Force recommended in its 1992 report, *Education: A Shared Responsibility*, changes in five particular areas: leadership development, structure of the education system, accountability, policy development and human resource development. Central goals of the reforms are to put maximum resources into teachers' hands and to revitalize community participation in schools. Also, the province's *Education Act* is being revised, based on the report's recommendations.

- In New Brunswick, the Commission on Excellence in Education placed its report, *Schools for a New Century*, before the provincial legislative body in May 1992. Strengthening the climate for learning is central to the philosophy of the report. Features reflecting this purpose include changes and innovations such as restructuring the number and organization of school boards, emphasizing measuring progress made toward achieving suitable provincial educational goals, and strengthening links between education and its principal stakeholders.

> ***". . . accountability for the quality of education is a responsibility that must be shared by teachers, parents, administrators and students."***
>
> **Jacques Chagnon, Minister of Education, Quebec, and Chairman, Council of Ministers of Education of Canada**

- During 1991-92, a Select Committee of the Nova Scotia Legislature conducted a study and public hearings on topics related to elementary and secondary education programs and administration. The committee's recommendations call for measures to establish a "chain of accountability that must be clearly defined and understood by all partners in education."

  In Newfoundland, the Commission of Inquiry, responsible for reviewing the delivery of programs and services in primary, elementary and secondary education, reported to the government in May 1992. The province's overall strategic plan includes recommendations from the commission's report, as well as measures to coordinate the activities of all departments relative to policies and activities affecting Newfoundland's economy. The Economic Planning Group includes representation from senior education policy people to facilitate an education and training strategy consistent with the province's economic vision.

- Ontario's education reform program, which began in 1989, includes restructuring elementary and secondary education, education finance and governance. The following six areas constitute the focus for change: the early years - junior kindergarten; the formative years - grades 1 to 6; the transition years - grades 7 to 9; the specialization years - grade 10 through graduation; technological education; and teacher education, both inservice and preservice. These reforms are based on fundamental principles of excellence, equity, accountability and partnership.

  In July 1992, Ontario made it mandatory for all school boards to develop and implement policies on anti-racism and ethno-cultural equity. The objective is to address systemic barriers in the education system that prevent racial minority students from reaching their full potential. The legislation is a first in Canada.

  In May 1993, the Ontario Minister of Education announced the establishment of a Royal Commission on Learning. This five-member commission will undertake a provincewide effort to make recommendations about the goals, standards and programs to guide Ontario's elementary and secondary schools into the 21st century.

- In Quebec, a four-year plan (1988-1992) to improve training, academic achievement and the quality of written and spoken French is the focus of a major cultural and educational initiative of the education ministry, in partnership with school boards throughout the province.

- In April 1991, Manitoba published *Creating a Framework for the Future*, a consultation paper that identifies and describes several major issues requiring examination in light of the province's changing environment. This consultation paper was designed to initiate a comprehensive review of Manitoba's education legislation. it has promoted discussion and debate on fundamental questions in education, with a view to soliciting recommendations from the education community and the public at large. Also, *Building a Solid Foundation for Our Future: A Strategic Plan, 1991-96* establishes a coherent framework that provides clear direction and specific initiatives for the education department for 1991-96.

- Saskatchewan's Indian and Metis Education Policy (1989) and the Task Force on Northern Education are aimed at improving participation in educational opportunities for all its citizens. The province's Core Curriculum Strategy, now in the fourth year of its 12-year implementation cycle, guarantees common essential learning while allowing for local and individual adaptation.

- In Alberta, the *School Act* of 1988 is based on principles of access, equity, flexibility, responsiveness and accountability. *Vision for the Nineties* and *Achieving the Vision* are the action plans and system "report card" documents that serve as benchmarks in educational services assessments. Additionally, in 1991, the *Universities Foundations Act* was introduced to establish and stimulate processes and support from the private sector for universities.

- In British Columbia, the 1988 report entitled, *Royal Commission on Education: A Legacy for Learners*, resulted in a number of initiatives. The major mandate included quality enhancement, teaching methods and curricula, accountability, and examination and change of the existing structures of education. More than 2,000 commissioned written and oral briefs were presented to the commission, representing the largest public consultative process ever attempted in an educational context in the province. Public concerns included universal access to the educational services, choice of programs to allow for individual differences, the role of the school in improving student achievement, and the need for a stable, cooperative and positive educational environment.

CHINESE TAIPEI (Taiwan)

PEOPLE

Population (1989 estimate): 20 million
Languages: Mandarin Chinese (official), principal dialects — Taiwanese, Hakka.
Education: Years compulsory — nine; attendance — 99%. Literacy (1986) — 92%.
Work force (7.7 million): Agriculture — 17%; industry — 41%; services — 42%.

EDUCATION

In 1985, about 25% of the population attended school, reflecting the relative youthfulness of the island's population. Since 1968, a nine-year, free, compulsory education system has been in effect. Taiwan has an extensive system of higher education, with admission through competitive examinations.

GOVERNMENT

One-party dominated system, Nationalist Party — Kuomintang (KMT). The authorities in Taipei claim to be the government of all China, including Taiwan.

ECONOMY

GNP (1989): $150 billion; per-capita GNP (1989): $7,500.

Foreign trade has been the engine of Taiwan's rapid growth over the past 40 years, with exports changing from predominantly agricultural commodities to industrial goods (95%).

CHINESE TAIPEI: ASSESSING THE QUALITY OF HIGHER EDUCATION PROGRAMS AND STUDENT LEARNING

*Wei-fan Kuo**
Minister of Education

Pursuing advanced education in the higher learning institutions has been a profound tradition of the Chinese in general, and in Taiwan in particular. This unusual phenomenon can be evidenced through the rapid growth of the numbers of higher learning institutions. In 1950, there was only one university in Taiwan, together with three colleges and three junior colleges. By 1993-94, the numbers had been increased to 22 universities, 29 four-year colleges and 74 junior colleges. The assessment of the quality of higher education programs has been manifested through students' industrious and successful learning both at home and abroad. The combination of continuous domestic and international education has marked a striking feature of Taiwan's higher education programs supported by the government.

It is indeed a common belief that success in promoting higher education has to be made possible through social and economic development. This convincing argument has characterized the educational phenomena of Taiwan in the past four decades. In 1950, the national education budget was merely $3.9 million. By 1980, however, it was increased to $280 million. And in the school year of 1992-93, the allocation was $14.94 billion for 689,185 students, or 1.56% of the total population.

In order to assure the quality of higher education, the strategic planning and pragmatic experiences of the Republic of China on Taiwan can be cited for reference, if we want to assert that both quality and quantity are needed for rational social development.

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*Represented at the ECS Asian-Pacific/North American Conference by Li Chen-ching, Director, Cultural Division, Coordination Council on North American Affairs.

First, traditional respect for higher education should be emphasized. In Taiwan, a national standard has been maintained through competitive entrance examination into colleges and universities. This type of impartial and open competition has led to an overwhelming awareness of the whole society.

Second, more budget should be allocated for higher education, if possible. Taiwan has underwritten in its constitution that 15% of the total central government annual budget be used for education, science and culture. This trend has accounted for the striking fact why there are more and more Taiwanese students choosing not to go overseas for further studies. Instead, they decide to pursue advanced education at home in Taiwan. In the meantime, there is a new trend of the so-called "reverse brain drain," depicting the phenomenon of more and more Chinese Americans returning to Taiwan for career development.

Third, internships and cooperation between business corporations and higher learning institutions are essential. This joint venture has motivated the rapid growth of higher learning institutions in Taiwan, providing better quality of college students as a result.

Finally, the attitude of parents on higher education is essential. It is through this consensus of parents that higher education programs can be further improved and scholars can thus be better respected. This culturally conditioned social trend has also ensured the continuity of education from elementary and secondary education to postsecondary education in Taiwan. And above all, pluralistic variables can be used to ensure success in postsecondary education, as well as in enhancing students' efficient learning.

The Seventh National Education Conference recently held in Taipei (June 22-25, 1994) reiterated the strategies and national policy of upholding and assessing the quality of higher education programs in Taiwan. Focus on student learning leading to efficiency and diversity has been enthusiastically discussed by participating educators at home and abroad. Themes of this conference included redistribution of education resources, shaping up a flexible education system, renovating curriculum development, improving teacher training strategies, upgrading quality of postsecondary education programs, promoting lifelong or adult education, and improving cultural and educational exchange between the Chinese mainland and Taiwan. In addition to these major themes, topics on international education in the global village, restoration of moral education and traditional values, etc., have been touched upon. All these programs have had their basis built upon postsecondary education.

Taiwan has been pushing its national education goals enthusiastically. In trying to share with and learn from education policy makers of other nations, I am glad to be able to present our educational experiences to all of you who are participating in this significant conference. It is my belief that success in higher education serves as an indispensable driving force for social advancement. Thus, more intensified cooperation in the international study of assessing the quality of diversified higher education programs and student learning is essential if we are willing to fulfill our general educational goals in this global village. As Taiwan has had a long tradition of education system constantly reinforced by its cultural heritage, we are proud of our steady progress in higher education programs. It is my sincere hope that through joint effort in cooperative research and administration, we all can build a brighter future of education for all.

"Success in higher education serves as an indispensable driving force for social advancement. Intensified cooperation in the international study of assessing the quality of diversified higher education programs and student learning is essential if we are to fulfill our general educational goals in this global village."

Wei-fan Kuo

CHINESE TAIPEI: YEAR OF EDUCATION REFORM

Yu Yuh-Chao
Director, Bureau of International Cultural and Educational Relations
Ministry of Education

Educational practice in my country reflects the great importance Chinese have long placed on scholarly attainment. Our education system has successfully provided the nation with a large pool of well-skilled, competent individuals who have in turn contributed a great deal to the rapid developments in every field. These educational achievements are directly related not only to the traditional Chinese emphasis on education but also to a constitutional guarantee of the national education budget and to the close association and partnership of schools, families and students. We Chinese have a saying that "it takes 10 years to grow a tree and 100 years to cultivate a human." From this simple saying, you understand we are committed, deeply, to education. We have a strong sense of mission to develop education for the sake of our people.

The constitution stipulates that no less than 15% of the national budget, 25% of the provincial budgets and 35% of county and municipal budgets shall be appropriated for education, culture and science. And 1994 has been designated as the Year of Education Reform in my country. The Ministry of Education sponsored a national conference on education in June 1994, with more than 400 scholars and experts in attendance. Prior to this four-day conference, the seventh of its kind ever since 1928, 42 smaller-scale meetings were held. This seventh national education conference came up with a very important decision, among other things, that a special ad hoc council for education reform will soon be established.

"We are confident that on the basis of the remarkable achievements in education in the past four decades, we will be able to let education carry my country and my people triumphantly into the 21st Century."
Yu Yuh-chao

Our goals and priorities in education are based on conclusions reached at this conference. The most important aim is to pursue excellence in education. Tied to that are five goals.

- *Moral and ethical education.* We put much emphasis on discipline and morality.
- *The intellectual pursuit.* We want to train our students so that they can have adequate knowledge in science, technoiogy and other useful fields.
- *Physical education.*
- *Sense of mission.* We want to develop in our students a very strong sense of mission, to work and contribute to the community, to the nation.
- *Sense of beauty*, the ability to appreciate arts.

These are among our long-term goals. But in pursuing excellence in education, we, of course, have to do many, many things. The next important goal is to adopt a pluralistic approach to education. As the country has been undergoing the long process of democratization, the public has been demanding relaxation of curbs in every aspect of their lives — social, political, economic and educational. The

traditional standardized approach has gradually given way to this new approach which we believe can more effectively bring about better results.

Priorities

As to our priorities, I would like to mention the following points.

1. Allocating education resources properly
2. Establishing a more flexible school system
3. Revamping our school curriculum
4. Improving our teacher training system
5. Raising the quality of colleges and universities
6. Improving lifelong learning
7. Developing a public interest in sports and recreational activities
8. Improving education for the exceptional and the minority groups.
9. Shifting the ratio of the senior academic high schools and the vocational high schools from three to seven to six to four
10. Accelerating academic exchange between Taipei and Beijing
11. Strengthening international culture and educational relations.

I would like to focus on the last point because this conference is perhaps most concerned with the need to improve international culture and educational relations. There is enormous room for international culture and educational work such as strengthening intramural cooperation, exchanging expertise in teacher training, organizing international academic conferences, providing service to foreign students in Taiwan and increasing exchange of publications.

"Traditional respect for education ensures the quality is there. Government and state policies for spending money ensures quality. No institution can do a good job without sufficient resources."

Li Chen-ching, Director, Cultural Division, Coordination Council of North American Affairs, Chinese Taipei

Another area of interest is to use the linkage of the Taiwan academic network and the INTERNET more effectively so that scholars in Taiwan can work closely with their foreign counterparts. And, in light of the success of South Korea's Educational Development Institute, I wish to encourage participants in this meeting to consider establishing an Asian-Pacific institute for education, so that important issues involving education policy or education reform can be closely, profoundly, studied among member countries of the institute.

Also, may I propose a ministerial conference in the future in which education ministers from the Asia-Pacific region could meet to discuss important issues of mutual concern.

Education key

It is our common belief that only through education can we hope to solve many, many problems. My country's education policy stresses national morality, the great cultural tradition, scientific knowledge and the ability to work and contribute to the society as a whole. To implement this policy, we have set forth the priorities described above for the coming decade.

We are confident that we will be able to let education carry my country and my people triumphantly into the 21st Century. To accomplish this, we need your help and encouragement.

CHINESE TAIPEI: EDUCATION GOALS TARGETING THE YEAR 2000

"Education and culture shall aim at the development among the citizens of the national spirit, the spirit of self-government, national morality, good physique, scientific knowledge, and the ability to earn a living." Based on this statement, the Ministry of Education has mapped out mid- and long-term strategies for education development. Following is a tentative list of this country's education goals targeting the year 2000.

1. Pursuing a balance between the humanities and science and technology as well as strengthening postgraduate research so as to upgrade the academic level of higher education.

2. Establishing a complete system of technological and vocational education so that senior vocational schools, junior colleges and institutes of technology are linked closely together in terms of the school system and curricula; setting up a system for licensing and certification to ensure professionalism.

3. Changing the ratio of students in senior high schools versus those in senior vocational schools from the current 7:3 to 6:4 toward the year 2000.

4. Increasing the enrollment rate of kindergarten kids aged 3 to 5 to 90%.

5. Putting more resources into special education in order to accommodate twice the number of those receiving special care.

6. Promoting lifelong education and establishing the whole system of lifelong education.

7. Improving teacher education, widening the channels for recruiting teachers, as well as screening teacher qualifications and implementing teaching internships carefully in order to ensure the professionalism of teachers.

8. Strengthening cooperation with international educational and academic organizations to broaden international cultural and educational interchange.

9. Carrying out the plan for "Ten-year National Compulsory Education" and reducing the class size to 35 students.

10. Implementing the project of improving education for local aborigines so as to heighten their performance.

HONG KONG

PEOPLE

Population (1987): 5.7 million
Ethnic Groups: Chinese 98%, other 2%.
Languages: Cantonese and English (official)
Education: Literacy — 90%.
Work Force (2.9 million, 1987): Agriculture — 1%; industry and commerce — 71%; services — 28%.

EDUCATION

The Hong Kong government provides subsidized education for children ages 7-16. At the end of primary school, children receive a free place in a secondary school for three years, based on parental choice and schools' internal assessments. There are seven government-financed institutions of higher education.

GOVERNMENT

British dependent territory. Hong Kong will return to Chinese control on July 1, 1997.

ECONOMY

GDP (1987): $45 billion; Per-capita Income (1987): $8,000.

With little arable land and no natural resources, Hong Kong has relied on its harbor for development. Its modern communications, transportation, banking facilities and expertise in China trade have made Hong Kong one of east Asia's newly industrialized countries. Hong Kong is a major center for U.S. investments, trade and contact with China and the rest of Asia.

ADDRESSING THE ISSUE OF QUALITY

Michael Leung
Secretary for Education and Manpower

I would like to share with you Hong Kong's achievements, progress and problems in the coming decade. But first, to set our education developments in context, Hong Kong is very much a Chinese society with 99% of population being from Southern China. This cultural background has influenced a lot of the education process and policies in Hong Kong.

For one thing, parents in Hong Kong are passionately interested in education. They want their children to go to the best schools and to be well-educated. In other words, they are very interested in getting results and they expect a lot of homework. This, perhaps is a weakness of the system — parents tend to expect a lot of examinations and cramming. So there is a certain amount of traditional attitude to overcome, that is, how to persuade parents to look at education as a process of learning and learning happily, not just learning by cramming or examinations.

Over the last 20 years, we have made a lot of progress in education in Hong Kong. In 1972, we achieved universal primary education for all and in 1979, we achieved nine years of free and compulsory education up to the age of 15. Now we are providing 85% of postsecondary and 10% of vocational places free. This is no mean achievement considering the low tax base of Hong Kong and the priorities we give to many other things.

Equally, we are paying attention to vocational training. We promote a lot of vocational and industrial training in institutes and vocational training centers. On the university front, we have provided for a rapid expansion of university places. Six years ago, we had only about 9% of our students going to

universities. This year, we've achieved 80% of students going to first-year, first-degree places in our seven universities in Hong Kong. Altogether, we provide for about one-quarter of our young people going to degree places and subdegree places.

There are three issues that we are confronting in the next 10 years. The first is the quality of school education, the second is language proficiency, and the third is higher education.

Quality of education

In the last few years, we have introduced a number of reforms in our system to improve the quality of education. At the school level, we have introduced what we call a "school-management initiative," which is to give parents, teachers and school councils more authority to run their own affairs and to promote the school best suited for their children. This is important, not just government dictating what to do but school authorities, school boards, parents and teachers all playing a part in the process.

The second achievement is that we set our aims and objectives in a document printed two years ago called *School Aims in Hong Kong*. This has been issued to all schools and parents to ensure that parents and teachers understand the aims and monitor results against the standards expected.

The other improvement is upgrading teacher quality. In the past, we had crash courses for teacher training, but now we are upgrading the level of teachers' education by training them to become better teachers and getting more graduates and degree holders among the teaching ranks, particularly in primary schools. In the last two years, we have started to introduce degree courses for primary-school teachers to upgrade their quality, and in September 1994 we will have graduate teachers in primary schools for the first time. Our aim is to have 35% of graduates in primary schools within 12 years time. Again, this may not be very ambitious from your point of view, but in Hong Kong, this is quite a major achievement.

Finally, in September, we will introduce a new institute of education for the training of teachers. This institute will combine the four existing colleges of education into an institute that could be upgraded to a degree-level institution over the next few years.

Language proficiency

"In many ways, Hong Kong pupils have tremendous pressure; they have to learn Cantonese, English and Mandarin."
Michael Leung

The issue of language proficiency is unique to Hong Kong in a number of ways. Hong Kong Chinese predominantly speak Cantonese, the dialect of the south, whereas people in the rest of China speak Mandarin, the language to the north. There is a communication gap between Hong Kong Chinese and the Chinese in the mainland. We also have a similar problem with Taiwan. So we must educate our young people to learn Mandarin so we can communicate effectively with the Chinese in the mainland. We are promoting this in the school system and outside schools by various activities.

The other reason we must have language proficiency is because Hong Kong is facing a tremendous change in our economy. In the last 10 years we have moved from a manufacturing base economy into a service industry one. As a result, a lot of workers have lost their jobs and need to be retrained. Change also means Hong Kong managers, businessmen and professional people are working in China and have to learn to use Mandarin.

The other problem is perennial. the use of English and Chinese in our schools. Historically, we have used English in the government, but in recent years, both English and Chinese were recognized as official languages in the government. In the business community, English is universally used, so we do promote English as a second language. On the other hand, outside the schools young people use Cantonese, their mother tongue. So we have the problem of trying to combine the use of English and Chinese. Bilingualism is not easy in Hong Kong because of this cultural difference. In many ways, Hong Kong pupils have tremendous pressure: they have to learn Cantonese, English and Mandarin, a problem compounded by the media which tend to use Cantonese and not Mandarin.

Higher education

The third element of our education challenge is higher education. In a way, this problem is related to China because Hong Kong will become a special military region of Chinese sovereignty on the 1st of July, 1997. Under the joint declaration between Britain and China, Hong Kong will become an autonomous region within China, preserving its capitalist system and way of life for 50 years after 1997. The law provides that the existing system of education will continue after this date, and freedom of education and teaching will be guaranteed.

However, it is important to look beyond the next 10 or 15 years and to consider Hong Kong in its unique position as a gate to China. Hong Kong needs to develop its higher education system, not just for the needs of the people of Hong Kong but also for the needs of southern China and perhaps beyond. If our universities are not staying ahead of universities in China, we will soon lose our edge. At the present time, our language ability puts us ahead because we are fully bilingual. But unless we continue to promote bilingualism in our universities and promote our universities as "centers of excellence," we will lose our advantage. Our latest idea is to consult the public on these future aims of higher education.

I do believe that the future is bright because we have a very sound education system, and Hong Kong has a commitment to education. Our government provides for at least 20% of funding every year for education which is the highest program financed by the government. We have a commitment to carry on education both for the good of Hong Kong and for the good of our children.

HONG KONG: EDUCATION FACTS*

About 24% of Hong Kong's population is in school or kindergarten, and in 1992-93 the government spent 17% of its estimated expenditure on education.

Nine years of free and compulsory education is provided up to the age of 15, and in 1993, the government expected to be able to provide subsidized Secondary IV places for about 83% of the 15-year-olds in a continuing program.

With both Chinese and English in common use, bilingualism is being adopted in schools.

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*Excerpted from "Hong Kong: The Facts," a Hong Kong Government Information Services Publication, printed by the Government Printer, Hong Kong (September 1993).

Fourteen schools operated by the English Schools Foundation offer education to English-speaking children. There are also some international schools open to children of all races.

There are three main types of schools: those wholly operated by the government, those run by voluntary bodies which receive financial assistance from the government, and private independent schools which receive no direct assistance from the government.

Kindergartens: Voluntary organizations and private bodies provide education for children in the 3-5 age group. These kindergartens are registered with and supervised by the Education Department.

The government gives assistance in the forms of reimbursement of rates and rent to nonprofit-making kindergartens; allocation of kindergarten premises in public housing estates; fee remission to needy parents and providing inservice teacher-training facilities.

Primary Education: Primary schooling starts at the age of 6. Most primary schools operate in two sessions. In 1971, free and compulsory primary education was introduced in all government primary schools and in the majority of aided primary schools. The aim of the six-year primary course is to provide a good general education appropriate to the age range and particular environment of the children. Chinese is the language of instruction in most schools with English taught as a second language. School enrollment for the 6-11 age group approaches 100%.

Secondary Education: On completion of the primary course, pupils are allocated free junior secondary places in government, government-aided and private secondary schools. The allocation system, known as the Secondary School Places Allocation System, is based on internal school assessment, scaled by a centrally administered Academic Aptitude Test, parental choice and the division of the territory into 19 school nets.

Based on school curriculum, there are three main types of secondary schools in Hong Kong — grammar, technical and prevocational. They offer a five-year course leading to the Hong Kong Certificate of Education Examination (HKCEE). Prevocational schools, which are fully subsidized by the government, provide students with a solid foundation of general knowledge and an introduction to a broad-based technical and practical education upon which future vocational training may be based. They do not set out to provide all the skills and knowledge of a specific trade or occupation. Rather, they provide the link between general education and education for employment through a knowledge of broad-based basic skills and a wide range of applications of modern techniques in at least two major fields of local employment.

HKCEE candidates may enter a two-year sixth-form course leading to the Hong Kong Advanced Level Examination for admission to local institutions such as universities and polytechnics.

The percentage of children aged 12 to 14 receiving full-time education is 96%, and the corresponding figure for the 15-to-16 age group is 78%.

Special Education: There are 62 special schools (including one hospital school operating classes at 13 hospitals) providing places for the blind, deaf, physically handicapped, maladjusted and socially deprived, mentally handicapped and children with learning difficulties. Voluntary organizations involved in this work receive financial assistance from the government.

The Special Education Section of the Education Department administers an integrated program for mildly disabled children in kindergartens and runs special-education classes in government and aided

schools for children with learning difficulties, partially sighted and partially hearing children. The section runs three centers providing assessment, diagnostic, remedial and placement services for children with special education needs. The section also operates Resource Teaching Centers and Adjustment Units for children with learning difficulties, behavior and emotional problems integrated in ordinary schools.

Postsecondary Education: Shue Yan College is the approved postsecondary college registered under the Postsecondary Colleges Ordinance. It is financially independent and has 3,070 students. Government financial assistance in the forms of maintenance grants and loans are available for eligible students at the college.

Teacher Training: The three general colleges of education — Grantham, Northcote and Sir Robert Black — and the Hong Kong Technical Teachers' College are run by the government. Full-time two-year courses in English and full-time three-year courses in English and Chinese are offered in the three colleges. Part-time inservice courses of training for kindergarten principals and teachers, primary and secondary school teachers, as well as teachers of children with special education needs, are available. The Hong Kong Technical Teachers' College trains technical teachers for secondary schools, prevocational schools and technical institutes. The four colleges also run full-time one-year advanced courses of teacher education and refresher training courses for serving primary and secondary school teachers.

The University of Hong Kong and the Chinese University of Hong Kong offer one-year full-time and two-year part-time post-graduate teacher education courses.

The Institute of Language in Education was established in 1982 to improve the teaching and learning of Chinese and English as subjects and the use of these languages as mediums of instruction across the curriculum. The institute offers a wide range of full-time and part-time inservice education courses and seminars to primary and secondary teachers, conducts policy-focused and development work, provides a resource center for language teachers, publishes a professional journal, books and news-letter, offers consultancy services on language in education and organizes an annual International Conference.

Higher Education: There are at present seven government-financed institutions of higher education.

HONG KONG: SYSTEM OF EDUCATION*

Introduction

During the past two decades, the government's main priority in the development of education in Hong Kong has been the progressive extension of the period of universal subsidized education. The first aim was to make primary education available to all. The White Paper of 1965 outlined a scheme for providing subsidized primary-school places for all who want them. By 1971, there were sufficient primary-school places for all children in the age group. Measures were then taken to make primary education compulsory and free (except in English-speaking schools and private schools).

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*Excerpted from an Information Sheet, Information and Public Relations Section, Education Department, printed by the Government Printer, Hong Kong, ED 1/4466/69/07/93.

The main proposal in the 1974 White Paper was to extend universal education to junior secondary forms. 1978 saw the introduction of nine years' free schooling for every child (except English-speaking schools). In 1979, the director of education's powers to enforce school attendance were extended to cover children up to the age of 14; they were further extended in September 1980 to cover all children up to the 15th birthday who have not completed Secondary 3.

In October 1978, the government published a further White Paper, putting forward proposals for the development of senior secondary and all stages of tertiary education, thus increasing and improving the opportunities available for further study upon completion of the nine-year basic course. In July 1981, a White Paper on Primary Education and Preprimary Services set out the government's policy to improve the quality and standard of child care and education in that level.

After close consultation with members of the secretariat of the Organisation for Economic Cooperation and Development, the government appointed an international panel of visitors in June 1981 to conduct an overall review of the local education system. A report entitled "A Perspective of Education in Hong Kong" was subsequently published in May 1983. The government announced in March 1984 that an Education Commission, as recommended by the Panel of Visitors in their report, would be set up to coordinate, consolidate and give advice on education policy in Hong Kong.

In October 1984, the Education Commission published its first report setting out its recommendations, subsequently accepted by the government. The recommendations included phasing out the Junior Secondary Education Assessment in 1991 through a progressive expansion of subsidized full-time postsecondary 3 educational opportunities; improvement of the standard of languages; promotion of Chinese as the medium of instruction; qualitative improvement and quantitative expansion of the teaching service; need to examine the development of open education at all levels; and improved coordination of research activities for the purpose of planning and formulating educational policies.

In August 1986, the Education Commission published its second report which dealt with preprimary services, the development of sixth-form education, teacher preparation, open education and financing.

The third report, published in June 1988, was concerned with two major educational issues: the structure of the tertiary education and the future of the private schools.

In November 1990, the commission published its fourth report after reviewing curriculum and behavioral issues related to free and compulsory education. The report recommended measures to improve the quality of education through changes to the curriculum development machinery, strengthening the guidance, counseling and remedial services to students, and providing special schools to cater to the needs of children at both ends of the ability spectrum. Other major recommendations included the introduction of a framework of targets and target-related assessment during key stages of children's schooling, further initiatives to improve language and subject teaching in schools, and plans into the next decade for enabling some primary children to enjoy whole-day schooling.

The fifth report of the Education Commission, published in June 1992, focused mainly on human resources, namely teachers who account for about nine-tenths of all recurrent spending on schools. Its recommendations covered a number of issues such as improving teacher education, including upgrading the colleges of education and the Institute of Language in Education into an autonomous Institute of Education which will offer some courses at degree level; upgrading about 35% of primary teaching posts to graduate status within 15 years; reducing workloads and improving career paths of teachers; reducing class sizes; and improving school environment and promoting teacher professionalism. Other recommendations included setting up a standing committee to promote home-

school cooperation, creating a new assessment mechanism for non-graduate qualifications, and setting up an Advisory Committee on Teacher Education and Qualifications.

The draft agreement on the future of Hong Kong stipulates that the present education system will be maintained after 1997, when Hong Kong reverts to Chinese control.

Total government expenditure on education rose from $4.247 million in 1981-82 to about $15.885 million in 1990-91. Over 1.4 million people are now receiving some form of full-time or part-time education — about 25% of the total population.

Educational Television (ETV)

ETV for primary schools began at in 1971 and was extended, one level per year, beginning in 1974. In September 1976, ETV was further extended to the junior secondary levels. At present, ETV programs in English language, Chinese language, mathematics, science and social studies are produced for both primary and secondary schools, while health education programs are also provided for primary schools. Programs for each subject area at each level are regularly broadcast to schools, Monday to Friday, over a period of 32 weeks,within the school year. Notes providing information on the programs and suggested preparation and follow-up activities are made available to teachers. In the case of English language programs for junior secondary classes and primary programs (except those for science and health education), pupils' notes are also provided. Wall charts for use in conjunction with the ETV programs, where appropriate, are also issued to schools.

In addition to the regular curriculum-based programs mentioned above, special programs on curriculum-related topics are also produced and broadcast to schools from time to time, whenever and wherever considered appropriate.

For reception of ETV programs, all government schools, aided schools and private secondary schools with government-bought places are provided with the necessary TV equipment.

Examinations

The Hong Kong Examinations Authority, established in 1977, is a self-financing statutory body responsible for conducting Hong Kong's two principal public examinations: the Hong Kong Certificate of Education Examination (HKCEE), taken in the fifth year of secondary schooling, and the Hong Kong Advanced Level Examination (A-level), taken in the seventh year. As well as being Hong Kong's most basic employment qualification, the HKCEE is also used to determine entry to the sixth form. A-level qualifications are used by the seven local tertiary institutions as entry qualifications for degree courses. They also serve as benchmark qualifications for middle-management posts in the civil service.

JAPAN

PEOPLE

Population (mid-1987 est.): 123 million
Ethnic Groups: Japanese; Korean 0.6%
Language: Japanese; Education: Literacy — 99%.
Work Force (60.7 million, 1988): Agriculture — 7.9%; trade, manufacturing, mining and construction — 32.4%; services — 43.3%; government — 7.2%.

EDUCATION

Japan provides free public schooling through junior high school. About 94% of students go on to three-year senior high schools, and about 90% complete high school. The Ministry of Education administers education at all levels and provides guidance, advice and financial assistance to local authorities, which provide education for their citizens from their own revenue.

GOVERNMENT

Parliamentary democracy.

ECONOMY

GNP (1989): $2.836 trillion; Per-capita GNP (1989): $23,040.

Japan's work force, high savings and investment rates, and promotion of industrial development and foreign trade have resulted in a mature economy. Japan has few natural resources, and only 19% of its land can be cultivated. Japan is the second largest trading partner for the United States and Canada.

JAPAN: NATIONAL EDUCATION GOALS

Yukihiko Hishimura
Director-General
National Institute for Educational Research

After World War II, Japan became a democratic nation and embraced a peaceful path to development. Thus, the educational mission of Japan was to prepare young people so that they might contribute to the new democratic vision and facilitate our goal of being a peaceful and prosperous society.

To this end, our educational policy encompassed the following major goals:

1. To universalize upper secondary education and to expand higher education
2. To maintain and improve overall quality of education
3. To nourish children with well-rounded personality.

To realize these goals, the national government has been taking various measures. Financially, the national government bears half the expense of compulsory school teachers' salaries to ensure a certain level of educational standards nationwide, and also provides one-third of the cost of school buildings and facilities. As to the teaching content, the national government develops and determines the curriculum standards in the form of course of study.

As a result of these and other measures, Japanese elementary and secondary education is evaluated highly internationally. For example, the advancement rate for students reaching the upper secondary school level is 96%, and the graduation rate of those students is 94%, both high ratios. In addition, Japanese students attain very high performance levels on international science and mathematics study.

"Educational reform in Japan seems to have been moving toward implementing good educational traditions similar to the United States. On the other hand, educational reform in the United States appears to aim at the direction that was previously pursued in Japan, which is to ensure that all students in the nation acquire a certain level of ability and skills through such measures as setting national goals and standards. Perhaps desirable education may be found in the middle course."

Yukihiko Hishimura

However, we are also aware that the current Japanese education system is sometimes criticized as being "too uniform" and "inflexible. To address these concerns, the Japanese Ad Hoc Council on Educational Reform was set up, and in 1987 the council pointed to three major directions to be pursued:

1. The principle of putting the emphasis on individuality, whereby young people are encouraged to realize and pursue their individual talents and inclination

2. The creation and enhancement of educational opportunities for people of all ages, what we call "lifelong learning"

3. And finally, coping with change, particularly internationalization and the information age.

Let me elaborate on the question of individuality. Putting emphasis on individuality means fostering children with abilities to think, make decisions and behave autonomously and independently. In this respect, educational reform in Japan seems to have been moving toward implementing good educational traditions similar to the United States. On the other hand, educational reform in the United States appears to aim at the direction that was previously pursued in Japan, which is to ensure that all students in the nation acquire a certain level of ability and skills through such measures as setting national goals and standards. Perhaps desirable education may be found in the middle course. As far as educational reforms are concerned, Japan and the United States may meet somewhere in between on the Pacific Ocean.

JAPAN: THE PROGRESS OF EDUCATIONAL REFORM

Kazuo Ishizaka
Head, Curriculum Research Division
National Institute for Educational Research

Under the banner of equal opportunity for all, and against the background of rising income levels and a fervent Japanese passion for learning, formal school education in Japan now reaches a broad segment of the Japanese society, making it the motivating force behind Japan's economic, social and cultural growth. On the other hand, radical social changes and the expansion of the quantity of education has left a great impact on the nature of education and brought with it certain negative social characteristics

as well, such as a society oriented toward human evaluation based on the single measure of the level of schooling attained, intensification of the "examination hell" in preparation for entry into higher education, delinquent behavior among young people and an extreme level of uniformity and inflexibility in formal school education. And in turn, calls have been made for the introduction of a new system of education capable of responding to today's far-reaching and rapid rate of social change.

In order to allow better response to these issues, the Ad Hoc Council on Education Reform (officially called the National Council on Educational Reform) was established as an advisory body under the prime minister, and it has engaged in broadly based deliberations, proposing reforms over a wide range of areas. Among its suggestions, the council has made the following recommendations as a basic outlook for educational reform: (1) the principle of putting emphasis on students' individuality; (2) shift to a system of lifelong education; and (3) enhanced response to recent changes such as internationalization and the advent of the so-called "information society."

The principle of *putting emphasis on individuality* means principles such as respect for the individual, respect for individuality, freedom and independence, and personal responsibility. In order to eliminate the adverse aspects of uniformity, inflexibility and closedness which have characterized conventional Japanese education, it will be necessary to undertake drastic reforms of the contents, methods and other aspects of education, based on this principle of putting emphasis on individuality.

The *shift to a system of lifelong education* is proposed as the result of reflection upon Japan's excessive reliance on formal school education, and in order to respond better to Japan's "maturing" society. Characteristics of this society include increasing amounts of free time, the aging of the populace and the broad attainment of high educational levels. In addition, as the result of social changes such as higher levels of technology and the shift to a services-oriented economy, a constantly growing demand exists for new knowledge and technology. To respond to these needs, a new education system must be formed, one which will allow people to freely select educational opportunities at any time throughout life, and which will evaluate those results appropriately.

"The shift to a system of lifelong education is proposed as the result of reflection upon Japan's excessive reliance on formal school education, and in order to respond better to Japan's 'maturing' society."

Kazuo Ishizaka

Response to change means that education must respond both aggressively and flexibly to the unceasing changes of time and society. In particular, the most crucial issues currently facing education include internationalization and the response to a new, electronic "information society."

The perspectives and concrete proposals for reform indicated by the findings of the Ad Hoc Council for Education Reform represent crucial material when considering the fundamental orientation of Japanese education into the next century. And in response to the significance of the council's reports, the government is aggressively advancing with requisite institutional and other educational reforms.

The Council on Lifelong Education in 1992 listed the following as the most pressing current issues: (1) promotion of recurrent education for adults; (2) support for promotion of volunteer activities; (3) enhanced extracurricular activities for young people; and (4) increasing the opportunities to study current social issues. These recommendations will form the focus for future measures oriented toward the advancing of lifelong education.

One indispensable issue in the promotion of lifelong education is the improvement of the educational roles of the home and the local community. With the shift from a six-day to a five-day work week, introduction of shorter working hours and increasing leisure opportunities, increasing calls have been made for the enhancement of the educational functions of the home and the local community. In conjunction with this trend, a five-day school week was introduced on a once-per-month basis beginning in September 1992. This measure was introduced based on a reassessment of the overall educational functions of school, home and local community, and with an eye toward the enhancement of the human potential of children living in the coming era.

"One indispensable issue in the promotion of lifelong education is the improvement of the educational roles of the home and the local community."

Kazuo Ishizaka

Japan s elementary and lower-secondary education system has been highly appraised by the international community for its high rates of attendance and its overall high quality. On the other hand, what is most crucial at the present time is to implement measures oriented toward the expanding of each child's individual potential and encouraging students' diversity of abilities.

In the area of curriculum at the elementary and lower secondary levels, the minister of education, science and culture established a set of curriculum standards called "Course of Study Guidelines," based on the recommendations of the Advisory Curriculum Council. Instruction is carried out at elementary and lower-secondary schools throughout Japan based on these standards. The revised guidelines issued in 1989 invoked the following four aims:

1. To help students become sensitive, well-rounded and spiritually strong
2. To emphasize learning on one's own and coping positively with social changes
3. To emphasize basic knowledge needed by all citizens
4. To provide students with broad international understanding, as well as respect for Japan's culture and traditions.

In short, these guidelines indicate a changing tenor in formal school education, from the previous emphasis on rote learning and techniques, to a system that emphasizes the development of the child's character and abilities for independent thinking and subjective judgment and behavior. They were implemented in 1992 at the elementary level, last year at the lower-secondary level and will begin this year at the upper-secondary level.

At the upper-secondary level, a number of reforms aim to expand students' individuality and range of choice. (1) First, while the previous system divided upper-secondary education into "regular" and "technical" courses, a reevaluation of this system has resulted in the introduction of a new "comprehensive course" which allows students to personally select from a new diversity of elective subjects; (2) full-time "credit-system" high schools have been established, eliminating the concept of "school year" and allowing graduation based on the accumulation of required credits; (3) interschool coordination has been implemented, opening the way to transfer of credits earned at other schools; (4) means to grant high-school credits for work completed at special training schools have been introduced; and (5) a system was introduced to grant high-school credits for the passing of practical achievement examinations taken outside of school.

Japan has a slogan, "education is people," which represents the belief that the success of formal schooling depends heavily on the character and abilities of teachers. As a natural result, one of the most important of Japan's education policies is the continual improvement sought at each level of teacher education, hiring and professional inservice training (see next article). To this end, new reforms and institutional improvements have been introduced, including raising standards for a teacher's certificate and creating a system of inservice training for new teachers. Further, based on the aim of enhancing education geared to each student's individual needs, a greater level of deliberation and planning has been introduced to the assignment of teachers.

In higher education, Japan's universities contribute to the development of Japanese society by cultivating human talent and promoting academic research. On the other hand, numerous criticisms have been leveled at the state of Japanese universities compared to institutions of higher learning in many other countries. Some of those criticisms include insufficiency of educational activity, closed and rigid characteristics in terms of organization and operation, and decaying state of the educational and research environment. Within this context, and based on recommendations from the University Council, reform efforts are being implemented to raise the level of university instruction and enhance the levels of student individuality and dynamism. Those reforms include the introduction of wide-ranging flexibility to the graduate school program; generalization of the "University Establishment Standards," which stipulate the fundamental framework for university education; introduction of self-monitoring and evaluation systems to each university; provision of systems to allow class auditing and receipt of university credits by persons other than full-time university students; and finally, mechanisms to grant credits for the completion of non-university training programs.

At the graduate level, the qualitative advancement and enhancement of Japan's education system is imperative, both to assure the cultivation of a high level of human talent and to allow Japan to continue its international contributions. To that end, Japan is promoting, particularly in leading technological and academic areas, the establishment of new research courses and majors, installation of state-of-the-art equipment and facilities and establishment of new types of graduate school.

Further, with the rapid pace of technological progress and industrial restructuring, ongoing education for technicians at graduate schools and other institutions of higher education is increasingly important to allow them to acquire the latest in knowledge and technologies for their respective fields and assure us of the dynamic development of industrial society. We have named this system "refresh education" and are currently promoting its implementation.

"In the context of internationalization, exchange student programs are highly significant for the mutual stimulation of higher levels of education and research in Japan and other countries, the promotion of mutual understanding and friendship, and the cultivation of human talent for developing countries."

Kazuo Ishizaka

In the context of internationalization, exchange student programs are highly significant for the mutual stimulation of higher levels of education and research in Japan and other countries, the promotion of mutual understanding and friendship, and the cultivation of human talent for developing countries. Japan's government has proclaimed the goal of accepting 100,000 exchange students by the next century, and efforts are under way to implement the institutional measures necessary to reach that goal.

Finally, against the backdrop of the electronic information society, Japan is advancing with efforts to educate people with the ability to utilize information and to cultivate technical specialties, while also establishing information networks in the areas of education, academic specialties, culture and sports.

In the matter of education reform, the approaches taken by each country may not be the same. Since the education system of each country is based on its own respective history and past experience, it is only natural that the way to education reform should be perceived differently. But while acknowledging such differences in experience, when a large number of people from different nations assemble in one place to discuss the state of education in the next century, it is likely that a common education ideal will appear from among their midst.

"Since the education system of each country is based on its own respective history and past experience, it is only natural that the way to education reform should be perceived differently. But while acknowledging such differences in experience, when a large number of people from different nations assemble in one place to discuss the state of education in the next century, it is likely that a common education ideal will appear from among their midst."

Kazuo Ishizaka

JAPAN: EDUCATION REFORM IN THE PREPARATION OF TEACHERS AND ADMINISTRATORS

Takanori Sakamoto
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Elementary and secondary school teachers in Japan are trained in the universities or junior colleges approved by the minister of education, science and culture. Most elementary school teachers are trained at four-year elementary school teacher-training courses at national universities. Some of them are trained in other courses of these universities, as well as at local public and private universities and junior colleges.

Lower secondary school teachers are trained at national, local public or private universities or junior colleges, while upper secondary school teachers are trained at universities (undergraduate courses) and graduate schools — national, local, public and private.

In order to become a teacher of an elementary or secondary school, one is required to obtain a teacher certificate awarded by the prefectural board of education under certain conditions. For each level or type of school, teacher certificates may be classified into three major categories: regular, special and temporary. The regular certificate is subdivided into three classes: the advanced, the first and the second and is valid for life. In addition, for the lower- and upper-secondary school levels, each type of certificate is further divided into several categories according to the kinds of subjects to be taught.

Special certificates are intended to attract working people to the teaching profession. Therefore, they are granted to those who are working in sectors other than the teaching profession and who have specialized knowledge and techniques. Temporary certificates are granted to those who are not

qualified for a regular certificate. They are issued when an adequate number of teachers holding a regular certificate are not available for the teaching profession.

In 1989, a modification was made to employ those who lack a formal teaching certificate but have practical experience as part-time teachers. They are granted permission by the prefectural board of education to instruct some class hours of certain subjects or club activities. This program is designed to meet the diversified needs of elementary and secondary education.

There is no certification system for teachers at institutions of higher education. Qualifications for teachers at universities (including graduate schools), junior colleges and colleges of technology are specified in the ordinances of the Ministry of Education, Science and Culture, entitled "Standards for the Establishment of Universities," "Standards for the Establishment of Graduate Schools," "Standards for the Establishment of Junior Colleges" and "Standards for the Establishment of Colleges of Technology."

Inservice Education and Training

Inservice education and training are regarded as indispensable to the fulfillment of the teachers' duties. In Japan, the Law for Special Regulations Concerning Educational Public Services Personnel was enacted in 1949, which requests educational personnel and staff to engage in constant research and training to implement their responsibilities. The same law prescribes that the Ministry of Education, Science and Culture and the local board of education should help educational personnel and staff in various ways and provide them with opportunities for inservice education and training.

"Inservice education and training are regarded as indispensable to the fulfillment of the teachers' duties."

Takanori Sakamoto

Inservice education and training are currently conducted at each different level — national, prefectural, municipal and school. Inservice education and training programs include those for newly appointed teachers, training of teachers with five years of teaching experience, training on effective teaching of each subject, training on moral education, training on student guidance, two-year training for teachers who are sent to universities and research institutes, training for school principals in universities and research institutes, and training for principals in school management. There is also some short-term training abroad (16-30 days) for teachers which is something that other public employees are not entitled to.

In Japan, the importance of school-focused or school-based inservice education and training has been fully recognized for some time. It is one of the features of Japanese education that this type of inservice education and training has been well popularized among teachers in our country.

It is important to provide novice teachers with inservice training at the beginning of their teaching careers and thus help them make a successful start in their educational service. Currently, a session of training of 20 days is provided per year. In view of this, one of the most important proposals made by the National Council on Educational Reform in its report is the creation of programs for inservice training of beginning teachers. It proposes that all beginning teachers should be required to undergo one year of training immediately after their appointment under the guidance of supervising teachers, and the training should concern both actual teaching and other duties that teachers have to fulfill.

Regarding the inservice training of elementary and secondary school teachers, a statutory system of one-year induction training for beginning teachers was created in May 1988. This system has been put into practice progressively from the school year 1989. In the school year 1990, the one-year

compulsory training began to be administered for all beginning teachers at all public elementary and lower secondary schools. The inservice training of teachers other than beginning teachers is conducted in various forms at the national, prefectural, municipal and school levels. The national government holds "central workshops" for the inservice training of principals, vice principals, experienced teachers in different subjects and other teachers, and sends a great many teachers abroad as part of their, inservice training programs. It also encourages prefectural boards of education to send selected practicing teachers to new universities of education for study for a long time.

In addition, the national government assists prefectural boards of education with their programs for inservice training of teachers, for example, by providing them with financial assistance for their programs for inservice training of new assistant vice principals or other teachers.

Other current issues include the clarification of the division of responsibilities among training bodies for inservice education and training and the planning of an overall system of training in which training programs at the different levels are incorporated into a whole.

NEW ZEALAND

PEOPLE

Population (1988): 3.35 million
Ethnic Groups (1988): European 88%; Maori 8.9%; other Polynesian 2.9%.
Languages: English, Maori; Education: Years compulsory – ages 6-15. Attendance – 100%. Literacy – 99%.
Work Force (1.66 million): Agriculture and mining – 11.6%; industry and commerce – 40.9%; services and government – 47.4%.

EDUCATION

Education in New Zealand is free and secular in state schools and compulsory for all children aged 6 to 15 years, although in practice almost 100% start at the age of 5 years. In October 1989, the Department of Education and the education boards were replaced by six agencies assigned to administer early childhood and compulsory education. Three agencies administer the post-compulsory sector.

There is a renaissance in the learning and teaching of Maori language and culture, in recognition of the reality that New Zealand is the only place in the world where the Maori culture can be preserved.

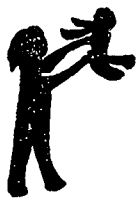
GOVERNMENT

Parliamentary system of government closely patterned on that of the United Kingdom; independent member of the commonwealth.

ECONOMY

GNP (1988): $37 billion; Per-capita Income: $11,040.

New Zealand is one of the world's most efficient producers of agricultural products, including wool, meat and dairy produce. Pine plantations make New Zealand a growing source of timber. Australia and the United States closely follow Japan in importance as trading partners for New Zealand.



NEW ZEALAND: NATIONAL EDUCATION GOALS AND PRIORITIES FOR THE COMING DECADE

Catherine Gibson
Group Manager, Implementation
Ministry of Education

New Zealand's national education goals are broad objectives directed to ensuring higher and more appropriate levels of skill development to support the achievement of stronger employment and income growth. These goals are published annually in the Budget Estimates as a statement of government educational outcomes.

In the 1993 and 1994 budget estimates, these educational outcomes were:

- A sound foundation in the early years for future learning and achievement.
- High levels of achievement in essential learning areas and essential skills throughout the compulsory schooling years.

- The promotion of excellence in tertiary education, postgraduate study and research.
- Provision of qualifications to enable all to participate successfully in the changing technological and economic environment.
- A highly skilled workforce at enterprise and industry level to enhance New Zealand's international competitiveness.
- Equality of educational opportunity for all to reach their potential and take their place in society.
- Success in learning for those with special needs.
- Full participation and achievement by Maori in all areas of education.
- Improvements in the effectiveness and efficiency of resource use in education.

These outcomes indicate government priorities across the whole education system, from early childhood to industry training and lifelong learning.

The government's education outcomes are further developed in *Education for the 21st Century*, which is being finalized after three years of work. Here the outcomes are restated as national education aims for the 21st century with one outcome added, "A community of shared values." Each aim is supported by a series of desired outcomes, targets, and monitoring and evaluation activities which will measure progress toward the desired outcomes. (See examples on pages 46-48.)

The national education goals (outcomes, aims) need to be seen within a context of ongoing reform in New Zealand across the entire state sector. Over the past eight years, successive New Zealand governments have sought to reduce government debt. Accordingly, there have been stringencies on spending and an emphasis on efficiency of resource use across all state-sector activities.

During the past five years, a redevelopment of the whole education system has been under way with the focus on increasing the effectiveness of education delivery, measured in terms of educational outcomes such as levels of skill development and student achievement.

"The national education goals (outcomes, aims) need to be seen within a context of ongoing reform in New Zealand, not only across every sector of education, but also across the state sector as a whole."

Catherine Gibson

The reforms which we have initiated to achieve the joint goals of increasing the efficiency and responsiveness of our education system, and of improving our education outcomes, include:

- Devolution of the management of schools to local communities.
- The creation of a revised national curriculum in which achievement objectives are specified at progressive levels, together with new national assessment procedures.
- The creation of a new National Qualifications Framework so that people may gain credit toward qualifications on the basis of the standards of achievement they can demonstrate, regardless of where they may have studied.

The government's overall emphasis is on further developing, completing and implementing new curricula and systems of assessment, completing implementation of a new national qualifications system, instituting a system of industry-based training in the post-school sector, increasing efficiency and effectiveness of administration and resource use by education providers, and strengthening accountability systems to ensure that the government receives value from its investment in education.

Changing Trends

New Zealand's education goals need to be seen within a context of changing trends in participation in education. In the past five years, there has been increasing participation in early childhood services by all groups of the population, with the most rapid increase among Maori and Pacific Islands families.

There also has been increased retention in senior secondary school (years 11, 12 and 13) due in part to the raising of the school-leaving age to 16 years, and in part to economic conditions which have resulted in low levels of youth employment. Schools have responded with new programs directed to improve the skill levels of school leavers and to better prepare them for their transition to employment or further education. There has been increased participation in tertiary education by both school leavers and older groups seeking professional redevelopment, and the level of participation of people under 30 years in post-school education and training is now among the highest for OECD nations.

The New Zealand government's current education priorities are to:

- Complete reforms in progress, with emphasis on completing the development of national curriculum documents in all areas of the curriculum in early childhood and compulsory education, and qualifications reforms in the senior school and post-school sectors.

- Achieve a seamless education system in which students can accumulate credits toward qualifications throughout life, regardless of where or under what conditions they are studying — in other words, a system in which traditional boundaries within and between various providers are blurred.

- Ensure that more New Zealanders participate in education and training and by getting all youth into education, industry-based training or employment, and by encouraging industry to provide on-job and off-job training which will increase the skill levels of the workforce.

- Improve systems for the effective delivery of resources to students and education providers.

There are, of course, issues to be worked through to achieve these goals and priorities. Curriculum and assessment reform in the school sector has been well received. Significant resources have been allocated to centrally contracted teacher development and to contracts for curriculum document development. The reform process, however, is limited by the ability of teachers to respond to the extent and rapidity of the changes. The process has been slowed to introduce only one revised curriculum statement in any one year.

"The reform process is limited by the ability of teachers to respond to the extent and rapidity of the changes."

Catherine Gibson

The National Qualifications Framework is a very significant undertaking. A new National Certificate has been established to replace all former nationally recognized qualifications, especially in the many vocational areas. Credits toward the new qualifications are to be accumulated in the form of "unit standards" which specify the outcomes to be demonstrated. The sheer number of unit standards to be

recopied, and the amount of consultation and advisory input required to establish these, means that progress has not been as fast as originally intended. At this stage, the universities are not convinced of the practicality or desirability of including degrees, or part degrees, on the National Qualifications Framework. Mechanisms have been established to work through these issues.

Achieving the appropriate balance of financial incentives together with sufficiently attractive training options is the single biggest problem limiting our policy of getting all youth of post-compulsory school age into further education, training or employment.

NEW ZEALAND: AIM — HIGH LEVELS OF ACHIEVEMENT IN ESSENTIAL LEARNING AREAS AND ESSENTIAL SKILLS THROUGHOUT THE COMPULSORY SCHOOLING YEARS

DRAFT

Desirable Outcomes

- A school system which consistently ranks in the top performing group of OECD nations on international measures of student performance and school effectiveness.
- A common understanding among parents, teachers and the community of the desirable standards of learning in school subjects for students during their years of schooling.
- An acceptance by enterprise and the general public that the school system is serving the needs of all children and the country as a whole.
- An achievement of New Zealand Curriculum level 5 or better in all essential learning areas by students at the end of form four (year 10).

Government Educational Outcomes

The output classes contribute to the following government educational outcomes:

1. A sound foundation in the early years for future learning educational outcomes.
2. High levels of achievement in essential learning areas and essential skills throughout the compulsory schooling years.
3. Excellence in tertiary education, postgraduate study and research.
4. Attainment of qualifications to enable all to participate successfully in the changing technological and economic environment.
5. A highly skilled workforce at enterprise and industry level to enhance New Zealand's international competitiveness.
6. Equality of educational opportunity for all to reach their potential and take their full place in society.

7. Success in learning for those with special needs.

8. Full participation and achievement of Maori in all areas of education.

9. Improvements in the effectiveness and efficiency of resource use in education.

Monitoring and evaluation

- The effectiveness of the system in delivering a high-quality education will be measured through national monitoring of representative samples of students of key ages, through the reporting by schools of profile results of their students' achievements in different subjects and through regular participation in international comparisons of students' achievement.

- Reports will be provided to the community on the actual performance of individual schools at least every three years.

- By 1995, schools will have developed coherent, systematic and verifiable measures of quality which can be reported annually to the community.

- By 1995, a record of achievement will be linked to the primary progress record cards and be fully operational in secondary schools, and by 1998 be promoted for use by post-compulsory educators and employers.

Targets (Some examples)

- By 1995, all primary schools will have procedures in place to report clear profiles of new-entrant children after the first month of school, in language, mathematics, social development and in health.

- Using the achievement objectives outlined in the set of national curriculum statements which are being developed, schools will demonstrate improvements in students' achievement from:

  1995 in science and mathematics
  1998 in science, mathematics, English, technology and Maori language
  2001 in science, mathematics, English, technology, Maori and other languages, the arts, social sciences, and health and personal well-being.

Monitoring and evaluation

- Participation in tertiary education will be monitored through existing statistical returns from tertiary institutions to the Ministry of Education.

- Systematic measures of quality will be reported annually to the community by tertiary institutions.

- New Zealand's performance in tertiary education will be compared with that of other member nations of the OECD as monitored and published by the International Education Indicators Project.

DRAFT

Desirable outcomes

- A tertiary system which has gained international recognition for the quality of its programs and graduates.
- A participation rate for 18- to 25-year-olds which is in the top performing group of OECD nations.
- An acceptance by enterprise and the general public that the tertiary education system is serving the needs of both students and the country as a whole.

Targets (Some examples)

- So that the tertiary system makes the best contribution possible to improving New Zealand's competitive advantage in the world marketplace, the tertiary system will establish graduate targets by 1995 in key strategic areas, such as biotechnology, and move toward these targets in future years.
- The number of New Zealanders in undergraduate tertiary education will by:

  1995 be 136,000 equivalent full-time students
  1998 be 153,000 equivalent full-time students
  2001 be 165,000 equivalent full-time students.

PACIFIC ISLANDS

The Pacific Islands consist of more than two dozen island groups making up three distinct areas. About 1,200 different languages are spoken. Levels of primary school enrollment and literacy are high; more than 90% of adults are literate, and more than 80% of students are enrolled in school. However, these ratios have been declining in recent years.

The Pacific Islands include:

POLYNESIA:

American Samoa — Pop. 46,773 (1990); U.S. territory. Compulsory education for ages 6 through 18; system based on U.S. pattern of eight years of elementary school and four of high school. Government sponsors early childhood facilities for ages 3 to 5.

Cook Islands — Pop. 18,092 (1989); self-governing. Free secular education compulsory for children between 6 and 15; scholarships available for study in New Zealand, Australia or other Pacific islands.

Easter Island — Pop. 2,060 (1986); territory of Chile.

French Polynesia — Pop. 196,900 (1990); French overseas territory. Eight years of compulsory education from ages 6-14; primary education financed by territorial budget; secondary and technical education supported by state funds.

Niue — Pop. 2,112 (1989); self-governing. Free, compulsory education between ages 6 and 14.

Norfolk Island — Pop. 2,490 (1989); Australian territory. Free, compulsory education between ages 6 and 15; students desiring higher education are eligible for bursaries (grants) and scholarships.

Pitcairn Islands — Pop. 68 (1989); British colony.

Tokelau — Pop. 1,700 (1989); New Zealand territory; preparing for self-government. Free education, attendance nearly 100%; kindergarten available from age 3, primary education between 5 and 13 and secondary education for five years after that.

Tonga — Pop. 100,465 (1989); independent; monarchy. Free, compulsory state education between ages 5 and 14; scholarships available for higher education study abroad.

Tuvalu — Pop. 9,061 (1990); independent; formerly "Ellice Islands."

Wallis and Futuna — Pop. 14,575 (1989); French overseas territory.

Western Samoa — Pop. 181,984 (1989); independent. Education system based on New Zealand system. 1992 legislation made education compulsory until age 14.

MELANESIA:

Fiji — Pop. 735,985 (1991); independent. No compulsory education, but in 1986, more than 94% of school-aged children were enrolled; free education for first eight years; coups of 1987 led to shortfall of teachers resulting from increased emigration; 87% literacy rate in 1986.

New Caledonia — Pop. 152,386 (1989); French overseas territory; 1998 vote set on independence. Schools operated by both the state and churches under the supervision of Department of Education; French government finances state secondary system.

Papua New Guinea — Pop. 3.5 million (1990); independent; 800 + languages. Education from preschool through postsecondary available, although facilities are inadequate. Children begin school at age 7, move to provincial high schools at 13 for three years, then national high schools for two years.

(Continued on next page)

PACIFIC ISLANDS (Continued from previous page)

Solomon Islands — Pop. 323,545 (1989); independent. Two-thirds of school-age children receive formal education, mainly in state schools. About 30% receive secondary schooling in one of eight national schools or one of 12 provincial schools. The latter provide "practical" curriculum, with a bias toward agriculture, while national schools offer more academic courses.

Vanuatu — Pop. 159,830 (1989); independent. Government efforts to improve education include ending fees for primary education, which boosted enrollment to 85%. Secondary education begins at age 12 and runs for seven years. Government working to double secondary enrollment by 1996.

MICRONESIA

Federated States of Micronesia — Pop. 100,789 (1990); self-governing; includes four diverse states — Pohnpei, Chuuk, Yap and Kosrae.

Guam — Pop. 133,152 (1990); U.S. territory. Compulsory school attendance for children ages 6 to 16. Higher education includes community college, two private business colleges and the University of Guam.

Kirbati — Pop. 72,248 (1990); independent; formerly "Gilbert Islands."

Marshall Islands — Pop. 42,018 (1989); self-governing. School system based on that of U.S. is operated by state; only 25% of students continue education beyond primary level because of limited resources and inadequate instruction. Lack of fluency in English hampers formally bilingual system.

Nauru — Pop. 9,053 (1989); independent. Free and compulsory education for children between 6 and 16.

Northern Mariana Islands — Pop. 43,345 (1990); U.S. commonwealth. Compulsory school attendance from 6 to 16 years of age. Available education ranges from preprimary to two-year postsecondary courses.

Palau — Pop. 15,004 (1990); self-governing; trust territory of U.S. Education system similar to U.S. Education free and compulsory between ages 6 and 14; secondary education may be obtained at public high school or one of several private ones.

PALAU: BRINGING PARENTS INTO THE PICTURE

Steve Umetaro
Director, Bureau of Public Instruction, Ministry of Education
Republic of Palau

NOTE: The Pacific Island nations described in the boxes above were represented at the ECS Asian-Pacific/North American Conference by delegates from Palau and Chuuk (Federated States of Micronesia).

I'm extremely honored and privileged to be here today to join you in the discussion of policies concerning our efforts to improve our schools and the learning of our children. I wish to express my sincere appreciation and heartfelt thank you to ECS for inviting me to this prestigious and distinguished forum, thereby giving me the opportunity to listen to you, ask questions and learn from you, and mostly, as a developing small island nation, to seek your

"We have a lot of logistics to deal with [100 schools scattered across 2,000 miles of ocean] before we can think about reform."

Kangichy Welle, Director of Education, Chuuk, Federated States of Micronesia

guidance as we struggle to develop our education system and improve the education of our children in the Pacific area, especially the Republic of Palau.

Our education goals are very simple and practical — to provide the best quality, relevant education possible to our Palauan children wherever they are in the republic.

That is why we are working to provide well-trained, dedicated teachers in all classrooms of the island; provide a well-planned curriculum relevant to our way of life, as well as one that prepares our students to live outside of the republic; provide adequate and conducive learning environments for all of our children; provide well-trained school administrators in all schools; and provide the necessary resources to support our education restructuring efforts.

Today, I will talk about one of the most crucial and important factors concerning our education programs — the involvement of parents in our school system. Like other nations, Palau is very much concerned about the critical need to involve parents not only in their children's learning but also in our school restructuring and reform efforts. Somewhere along the line, communication with parents about the education of their children was lost or disrupted and parents were ignored as the primary teachers of their children.

We are now finding that without continuing parental involvement in our schools in running activities and programs, our restructuring efforts are doomed to fail. We need to reconnect with our parents, to collaborate and establish working relationships or partnerships in order to provide a well-rounded education for all Palauan children.

"We are now finding that without continuing parental involvement in our schools in running activities and programs, our restructuring efforts are doomed to fail."

Steve Umetaro, Director, Bureau of Public Instruction, Ministry of Education, Republic of Palau

As a result of this, we began about three years ago, through our effective and successful school programs, to conduct parental involvement workshops at various school sites throughout the republic, as well as involve parents in curriculum development and development of our 10-year education master plan. This plan has been developed with technical assistance provided by the Pacific Region Educational Laboratory (PREL).

We also have been very fortunate to receive some money through the Eisenhower Science and Math Consortium for the improvement of all Pacific science and math programs. This money, administered by PREL, is being used to develop science projects in our schools, conduct training and workshops for science and math teachers and develop standards for the Pacific math and science programs.

PREL has been instrumental in facilitating as well as providing technical assistance training and workshops for our teachers and school administrators throughout the region. It is also doing a research development workshop for improvement of our Pacific educational development efforts. I would like to express my sincere appreciation to PREL for the tremendous job they are doing in the Pacific region.

"VISION FOR THE PACIFIC CHILD"

Pacific Region Educational Laboratory
Board of Directors

For the Pacific child, we envision a deep and abiding respect for self and others. High self-esteem and an unwavering belief in self are essential to a full and productive life. We wish for all our children to have the ability and commitment to maintain and sustain their culture(s) while valuing and being able to function in all other cultures of the Pacific and the world.

To be able to thrive in any community of choice, the Pacific child will need to have well-developed basic skills — the tools with which to think critically and problem solve in a positive, dynamic way.

We wish the Pacific child to have a deep sense of responsibility for the society in which he or she lives; to be aware of the environment, placing a priority on preserving and protecting it. The Pacific child should have a sense of commitment while seeking a world in which people are valued for their differences and their similarities.

We wish this so our children and our children's children will have the capacity to cherish the past while being prepared for the future.

REPUBLIC OF KOREA

PEOPLE

Population (1988): 43 million
Ethnic Groups: Korean, small Chinese minority.
Language: Korean; Education: Years compulsory — six; literacy: 98%.
Work force (17 million, 1988): Agriculture — 21%; industry — 28%; services — 50%.

EDUCATION

Free primary education is compulsory for children ages 6-12. Secondary education lasts for up to six years. In 1989, an estimated 79% of children attended secondary schools. In 1991, South Korea had one of the world's highest enrollment rates for postsecondary education.

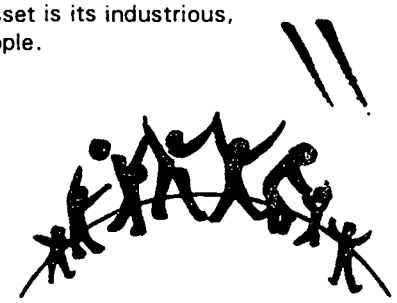
GOVERNMENT

Republic with powers shared between the president and the legislature.

ECONOMY

GNP (1990 estimate): $224 billion; Per-capita GNP: $5,500.

Over the past 25 years, Korea's economic growth has been spectacular. Despite the need to maintain a large military, South Korea is now the United States' seventh largest trading partner and a middle-ranking industrial power. Lacking natural resources, Korea's greatest asset is its industrious, literate people.



REPUBLIC OF KOREA: GENERAL GOALS AND AIMS OF EDUCATION

A. Philosophical Underpinning

The philosophical ideal which underpins Korean education, reflected in Article 1 of Education Law 1946, has formed the basis for the provision of education and innovative efforts. Article I adopted "Hong Ik In Gan," the statement of attributes to be developed by individuals and society. In addition to democratic ideals and national development, it emphasizes competency development and character perfection to promote self-realization. Although subject to variation in interpretation with the changing demands of time, it serves as the basic ideal which should be passed on to following generations.

Coming close to the threshold of the 21st century, we see new challenges looming large on the horizon as the result of continual industrialization and growing interdependency among nations. What comes out of these trends is cultural multiplicity, followed by value conflicts and the diversification of social strata. New information and knowledge will result in a frequent rethinking of culture and will aggravate the already confusing welter of alien influences. In the future society confronted with these challenges, "Hong Ik In Gan" suggests four major attributes — humanity, national identity, morality and a pioneering spirit — to be developed through education.

1. Humanity

The foremost quality of human beings is respect for the dignity and individual character of persons. Fostering this respect requires a balanced assortment of motivation for self-realization, emotional and aesthetic enrichment, freedom and recognized equality. The humanity comprising these qualities has

been a common denominator of Korean people while they have lived a precarious life over many centuries. "Hong Ik In Gan" pervades every aspect of Korean culture.

2. National Identity
National identity is one's consciousness of the distinctive nature of his nation and people from those of other countries. In a way, it means a behavioral disposition to achieve self-realization in the context of his relation with the nation and other persons. It comprises self-consciousness, independence and mastery of one's own destiny. A person with these sensitivities has a positive view of the nation, its culture and history, and a strong sense of patriotism.

3. Morality
Morality is a kind of awareness structure that has internalized social norms, and its manifestations are faithfulness, honesty, altruism, cooperation and trust. Faithfulness is a stubborn adherence to and care for truth with all sincerity. Honesty is a righteous life faithful to the dictates of conscience. Altruism is a behavioral tendency to sacrifice oneself in favor of the comforts of others. Cooperation is an intention to harmonize oneself with others for the sake of ensuring the community's good. Trust is a sense of reliability built into each other in person-to-person relationships. In other words, it is a kind of glue that holds people together in cultivating friendships. Morality's manifestation in these attributes is an essential ingredient of community life.

4. Pioneering Spirit
Pioneering spirit is a behavioral tendency to break loose from tradition and venture into the unknown. People with pioneering spirit are open to change, future-oriented, creative and rational. At this crucial juncture of the nation's development when it is about to make a leap into the ranks of industrialized countries, pioneering spirit is passionately to be desired.

B. The Ideal Profile of an Educated Korean

Today's youth will be the leaders of our future society. Education's role is to prepare them for the challenges of the future. Therefore, it is important to assess future needs and define attributes which will enable youngsters to cope with the future society. This task is an important step to be taken at the initial stage of educational reform.

The ideal profile of an educated person may be drawn by comparing the future needs and the defects of the present education system, since the gap between them provides clues for the direction of educational development. Waves of change will be surging upon the shores of the future society, requiring new, creative solutions. Yet, creative individuality will tend to be lost in the masses of people attending schools. Mass production in school must be a matter of serious concern, as it limits the development of individual potential. The industrial structure will resemble that of industrialized countries, and the demand for high-level manpower will increase. The explosive growth of information and knowledge will cause the advent of the information society.

Growing interdependence among nations will precipitate the transformation of Korea into a more open society, and ever-rising standards of living will reflect marked changes in living patterns. On the other hand, there are critical views blaming Korean education for failure to develop a sense of identity and independence and for the uniformity of educational programs that stymied the fullest development of individual potential for self-realization. Amid the past primary concern for imparting knowledge and the consequent prevalence of rote-learning, little attention was directed to moral virtues.

Educated Koreans should assume leadership roles in the shaping of a new society. The qualities and traits to be developed center around the ability to live creatively with a firm sense of identity and

morality. Yet they should be defined in concrete terms to give clear messages to professional educators. A more detailed description of an educated person is attempted here.

1. Person with Self-Reliance

A person with self-reliance shows initiative and is self-driven to get things done as the master responsible for the shaping of his own or her own destiny. Such a person has a positive orientation toward life and the nation's history, a clear conviction about the nation's destiny and a sense of the interdependence among the constituents of the community. He is willing and prepared to become a creative participant in the making of the community or group to which he belongs. He is aware of his physical and mental characteristics and potential and is determined against dependence on others. He is never abrasive and avoids self-righteousness and chauvinistic attitudes. He takes pride in the nation's historical and cultural heritage and is determined to develop it. This initiative and self-reliance inspire patriotism and dedication to the greater good of the nation and the people.

2. Creative Person

Creative man is disposed to inquire into the unknown and to take an innovative, unbeaten path through the thicket of problems. He is flexible and rational in thinking and open to change. Reason prevails over emotional impulses. He is venturesome and future-oriented. Productivity is another dimension of creativity. To be productive, one should be motivated to achieve for one's self-respect. Secondly, he should have a positive attitude which recognizes and appreciates the value of hard work. Thirdly, striving to produce and to improve one's economic status should be carried out with honesty. One's imagination about the future unleashes a powerful drive to organize the necessary conditions to create it. Although he is accommodative of, and open to change, he does not accept it passively. To him, change is only one option, an opportunity for a creative take-off into the future.

3. Person with Moral Consciousness

A person with moral consciousness is willing to adhere to fundamental principles and norms of the society in which he lives. Moral consciousness includes ethical consciousness, democratic citizenship, emotional stability and aesthetic sensitivity to local community and worldwide needs. Ethical consciousness is a disposition for self-control and regulating one's social behavior. Democratic citizenship includes a law-abiding spirit, patriotic cooperation and responsible accountability. A person of emotional stability has nothing to do with prejudice, unfairness or injustice. Aesthetic propriety serves first as a fortress against the onslaught of ugly impulses, makes a person work unselfishly for the common good and compels a person to fulfill the trust that others place in him or her.

C. Direction of Education Reform

The ideal profile of an educated person described above suggests that a fundamental reform be made of the education system. The direction of education reform was set forth in terms of what it aims at producing — "Education for Subjective Consciousness," "Education for the Whole Person," "Education for Creativity" and "Education for the Future." The direction of education reform is also described in terms of the principles that should guide operational and managerial practices, principles of excellence, individuality and autonomy. For education to bear fruit, the essential conditions are humanization of the education process and society's proper use of education opportunities for youth and adults.

For education to bear fruit, the essential conditions are humanization of the education process and society's proper use of education opportunities for youth and adults.

1. Education for Subjective Consciousness

One goal of education is to produce people motivated to inherit, develop and transmit the nation's cultural heritage to succeeding generations. The source of this motivation is awareness of the meritorious virtues of the cultural heritage. Education has a vital role to play in fostering this awareness. Throughout earlier millennia, Koreans have suffered numerous setbacks, largely due to the dearth of resources coupled with foreign military incursions. Consequently, our ancestors lost pride and confidence, resulting in pessimism. Education should help root out this traditional inertia and inspire a movement to rediscover the roots of the contemporary culture. This dormant potential, once bestirred, will rally the people behind the cause of national modernization and reunification.

2. Education for the Whole Person

Korean education has been blamed for merely imparting knowledge. What is needed now is a balanced assortment of knowledge, commendable character for interpersonal relations and physical health which unleashes a powerful driving force for national development. Education reform should provide a turning point to switch goals from knowledge-bound education to individualized education dedicated to nation-building in an international context.

3. Education for Creativity

Korean education, primarily concerned with imparting knowledge, has emphasized rote-learning. Restless with the breathtaking increase of school population, schools have paid little attention to individual needs with the resultant failure to ignite curiosity. While the current of science and technology was rapidly advancing, education has remained in the backwaters. But the harsh reality of fierce competition among nations does not allow our education system to remain stagnant. It is a matter of survival to keep the rapidly advancing frontiers of technology moving forward. The nation will become a permanent straggler in the race unless educators part with the conventional mode of dishing out knowledge and shift into a new mode which ignites the fuse of creative potential.

4. Education for the Future

The explosive growth of information, the frequent outdating of knowledge, the advent of a highly industrialized society and the growing competition among nations defy predictions as to what future society will be like. What is expected of education is to develop an ability to adapt to a changing situation. Besides instilling basic knowledge and skills, educators should do justice to experiences which develop skills of application and adaptability. Opportunities for education should be diversified to reach different masses of people of all ages and of any social status. In this connection, ideology, education which keeps people's desire for reunification burning deserves strong attention.

5. Ensuring the Excellence of Education

To remain competitive in the international community, the education system should undergo a massive reform which ensures its excellent quality. The time has come for Korean education to end emphasis on quantitative size and emphasize creative peaks of excellence. Education directed toward this goal taps individual potential to the fullest measure and assists in self-realization. Education that seeks excellence requires highly qualified teachers, diverse programs and teaching methods that cater to individual needs. Evaluation should be employed to feed back information useful in improving the effectiveness of instruction. Accelerated graduation and grade repetition should be introduced.

6. Diversity of Operation

Uniformity and rigidity have been the hallmarks of most educational management up to now. These were the major factors which stifled individual characteristics of learners. To pursue the inherent goal of education, that is, to stretch one's potential to the fullest measure, diversity and flexibility should be reflected in managing the schools so that these attributes complement instruction catering to individual

needs. Together with the diversification of the operational mode of the school, multiple programs should be employed which fit a wide range of individual differences.

7. Autonomous Administration
As educational administration has been highly centralized, the school was dependent on administrative authorities and given only limited latitude. Earlier administration was characterized by orders from the top down. In view of the new challenges ahead, schools should be equipped with self-governing skills which will be developed when schools are given a full degree of autonomy, which develops the sense of responsibility and accountability. As local autonomy is institutionalized, each school should be encouraged to manage itself with its own creativity and resources.

8. Humanization of Educational Environment
While facilities and buildings in other sectors are modernized, most school facilities have remained as they were 40 to 50 years ago, far from providing an educative climate. Building an educative climate requires more than simply erecting new, modern buildings, however. The neighborhood which surrounds the school should be denuded of possible contaminants, and an internal climate filled with humanity should be built in classrooms and school. The combination of the three will create an environment which binds a teacher and pupils by humanitarian bonds.

9. Educational Functions of Society
Still, the education program is considered the monopoly of the school professionals. But the diversification of the school's role and clientele demands that the school be functionally linked to social organizations. It has become inevitable for the two to share the responsibility of educating both youth and adults. The time is ripe to intensify the educational efforts of all the people in a way that converts the society in its entirety into a field of learning. The educational function of the home should be restored, and greater efforts should be made to tap the educational function of mass media.

The nine basic principles mentioned above indicate the direction in which education reform should be made. They serve as the guideline to the formulation of specific policy steps to be taken. They are considered major benchmarks in the development of Korean education toward the 21st century.

REPUBLIC OF KOREA: NATIONAL GOALS AND STANDARDS OF EDUCATION

Jong-ha Han
President
Korean Educational Development Institute

I. Standards of education in Korea school curriculum

To ensure the standard quality of education, the Education Law Article in 1949 prescribes that the curricula for elementary and secondary schools are arranged by the minister of education. The national curricula become the criteria for educational program and textbooks development.

The curricula are revised on a periodical basis to meet changing demands of society and to reflect new developments in each discipline. Since the Republic of Korea was established, there have been six revisions of curriculum, the last revision being made in 1992. The new curricula will be put into

effect, beginning with kindergarten in 1995. The new elementary school curriculum will be in effect in 1995 for first and second graders, followed by third and fourth graders in 1996 and fifth and sixth graders in 1997. The year 1995 will see the new curricula put to use by middle schools, followed by high schools in 1996.

The following explains the school, i.e., the current National Curriculum Framework (fifth revision), and the new National Curriculum Framework (sixth revision).

II. The newly revised national framework for school curriculum

Newly revised school curriculum will be in effect in 1996. Main changes in the new curriculum revision are: (1) more decentralization of decisionmaking related to curriculum organization and implementation, (2) more structural diversification of curriculum, (3) enhancing the relevance of educational contents to society, and (4) increasing the efficacy of curriculum implementation. The ideal profile of the person whom the new curricula purport to produce is a healthy, self-reliant, creative and moral Korean who will lead the 21st century.

The most important policy change in new school curriculum is that it is giving more responsibility to municipal and provincial education authorities (MPEA) and schools to determine school curricula than ever before. Such a change toward decentralization in curriculum policy aims not only to enhance the relevance of the curriculum for students educational needs, but also link with real-life situations. It also gives more opportunity for teachers to participate in the curriculum development.

New school curriculum will purpose the following education goals. It is constructed with an emphasis on cultivating students as a whole person — physically fit, intellectually independent, creative, logical and sensitive toward other people and toward the environment as well as morally responsible. More details can be described as follows:

"International competition depends on education."
Jong-ha Han

1. Healthy person
   - Strong body
   - Diligence
   - Elegant taste
   - Well-balanced emotion

2. Independent person
   - Self-confidence
   - Autonomous decisionmaking ability
   - Progressive pioneer spirit
   - Strong awareness of national identity

3. Creative person
   - Basic learning skills
   - Scientific investigative abilities
   - Creative problem-solving abilities
   - Creative generation of ideas

4. Moral person
   - Traditional/democratic values
   - Awareness of human dignity
   - Sense of good citizenship
   - Concern for the well-being of others

Elementary School Curriculum

A. Standards

Subjects \ Grades		1	2	3	4	5	6
SUBJECT AREAS	Moral Education	Disciplined Life 60	68	34	34	34	34
	Korean Language	210	238	238	204	204	204
	Mathematics	120	136	136	136	170	170
	Social Studies	Intelligent Life 120	136	102	102	136	136
	Science			102	136	136	136
	Physical Education	Pleasant Life 180	238	102	102	102	102
	Music			68	68	68	68
	Fine Arts			68	68	68	68
	Practical Arts	-	-	34	34	34	34
Extracurricular Activities		30	34	34	68	68	68
Optional Courses		-	-	34	34	34	34
Grand Total		790(70)	850	952	1,034	1,054	1,054

* The above table shows the minimum number of total instructional hours by subject and grade level during 34 school weeks a year, except in grade 1 where the standard number of school weeks is 30.

* One instructional hour covers 40 minutes.

* In case of grade 1, 70 hours among the total 790 instructional hours should be allocated to an orientation program in March.

Middle School Curriculum

A. Standards

Subjects		Grades 1	2	3
COMPULSORY SUBJECTS	Moral Education	68	68	68
	Korean Language	136	170	170
	Mathematics	136	136	136
	Social Studies	102	136	136
	Science	136	136	136
	Physical Education	102	102	102
	Music	68	34-68	34-68
	Fine Arts	68	34-68	34-68
	Home Economics	68	34	34
	Technology and Industry	34	68	68
	English	136	136	136
ELECTIVE SUBJECTS	Chinese Characters and Classics	34-68	34-68	34-68
	Computer Science			
	Environmental Studies			
	Others			
	Extracurricular Activities	34-68	34-68	36-68
	Grand Total	1,156	1,156	1,156

* The above table shows the minimum number of total instructional hours by subject and grade level during 34 school weeks a year.

* One instructional hour covers 45 minutes.

The High School Curriculum

A. Standards

Subject Areas	Common Compulsory Courses	Compulsory Courses for Tracks	Elective Courses for Tracks
1 Ethics	Ethics (6)		Subjects excluded from the compulsory courses (8)
2 Korean Language	Korean Language (10)	Speech (4) Reading (4) Composition (6) Grammar (4) Literature (8)	
3 Chinese Characters and Classics		Chinese Characters and Classics I (6) Chinese Characters and Classics II (4)	
4 Mathematics	Common Mathematics (8)	Mathematics I (10) Mathematics II (10) Applied Mathematics (8)	
5 Social Studies	Common Social Studies (8) Korean History (6)	Politics (4) Economics (4) Society and Culture (4) World History (6) World Geography (6)	
6 Science	Common Science (8)	Physics I (4) Physics II (8) Chemistry I (4) Chemistry II (8) Biology I (4) Biology II (8) Earth Science I (4) Earth Science II (8)	
7 Physical Education	Physical Education I (8)	Physical Education II (6)	
8 Military Training		Military Training (6)	
9 Music	Music I (4)	Music II (4)	
10 Fine Arts	Fine Arts I (4)	Fine Arts II (4)	
11 Vocational Education and Home Economics		Technology (8) Home Economics (8) Agriculture (6) Industry (6) Commerce (6) Fishery (6) House Keeping (6) Information Industry (6) Career and Vocation (6)	
12 Foreign Languages	Common English (8)	English I (8) English II (8) English Comprehension (6) English Conversation (6) Practical English (6) German I (6) German II (6) French I (6) French II (6) Spanish I (6) Spanish II (6) Chinese I (6) Chinese II (6) Japanese I (6) Japanese II (6) Russian I (6) Russian II (6)	
13 Free Optionals			Philosophy Logic Psychology Education Life Economy Religion Environmental Science and Others (4)
Total Units	70	106	12*

Subject Areas	Common Compulsory Courses	Compulsory Courses for Tracks	Elective Courses for Tracks
Extracurricular Activities	Classroom Activities and Club Activities (12) Group Activities (4)		

* The figures in parentheses are the numbers of units to be completed, and one unit means the amount of school learning undertaken by a 50-minute instruction per week for one semester (equivalent to 17 weeks).

III. Standards for subject teaching

To ensure minimum standards of learning for every student, a syllabus for each subject defined in the National Curriculum Framework is prepared by the Ministry of Education. These syllabi provide teachers with general guidelines for the contents, instructional methods, evaluation and classroom organization. School textbooks are also developed within the framework of these syllabi.

REPUBLIC OF KOREA: EDUCATION AND ECONOMIC DEVELOPMENT

Wang-bok Kim
Director, International Cooperation Division
Ministry of Education

Since 1957, when the connection between education and a strong, positive impact on economic development, was discovered, Koreans have agreed that, without the appropriate investment in education, no economic development can be expected.

"Koreans have agreed that, without the appropriate investment in education, no economic development can be expected."
Wang-bok Kim

Korea maintained a persistent and high economic growth between the 1960s and 1980s. Education has been the major source of trained manpower in various kinds and levels of skills and is credited with contributing 22.61% of the total increase in the GNP. This trained manpower has been the major vehicle for advancing technology and higher productivity. Many studies showed that such an outstanding economic growth came from the government's strong effort to improve the educational environment by decreasing the teacher-student ratio, promoting teachers' job conditions, increasing the enrollment ratios of secondary and tertiary education, increasing the public educational expenditure ratio of the GNP, and so on.

Another critical factor is Korean people's great concerns for education. In our country, a student's educational achievement has a great impact on his/her career development. As James Coleman has noted, the degree of parents' concern for their children's education has great effects on children's achievement and, from an economic perspective, could be regarded as a social investment in education. Considering this factor, the amount of Korean investment in education might be greatly increased in comparison to the current nominal investment.

Results of research on education's contribution to Korean economic development are as follows:

1. There is a positive relationship between education and economic development. Proponents of the human-capital theory view educational cost as an investment to increase economic productivity.

2. Educational development is a prerequisite for economic development. The analysis showed that there is a very strong positive relationship between the per-capita GNP and the enrollment ratio of secondary and higher education.

3. The return of investment in human capital is not less than that of investment in physical capital.

4. Education contributes directly to economic growth through the improvement of labor quality.

5. Education contributes indirectly to economic growth through its linkage effect on other industries which stimulate the development of other industries.

Second, I'd like to present some statistics on Korea's educational environment, which is far behind those of the developed countries in terms of investment in education.

1. The ratio of educational budget to GNP

Korea (1991)	U.S.A. (1991)	England (1991)	Germany (1991)
3.7%	7.0%	5.3%	5.4%

2. Number of students per class

	Korea (1992)	U.S.A. (1992)	England (1992)	Germany (1992)
Elementary	38.8	N.A.	26.4	22.0
Secondary	48.2	N.A.	20.7	25.0

3. Ratio of students to teacher

	Korea (1991)	U.S.A. (1991)	England (1991)	Germany (1991)
Elementary	35.6	15.2	21.5	20.5
Secondary	34.6	15.6	13.2	19.3

How is it we could have improved labor quality under such poor education conditions? The answer is the strong desire of Koreans for higher education — "Korean educational zeal."

"How is it we could have improved labor quality under such poor education conditions? The answer is the strong desire of Koreans for higher education — 'Korean educational zeal.'"

Wang-bok Kim

1. The government's efforts to develop Korean education have aimed at supplying manpower for economic development rather than raising the next generation as well-rounded persons. Individual enthusiasm for education has been expressed as aiming at achieving high social and economic status rather than growing to be a well-rounded person.

2. The educational zeal of the Korean people can be attributed in large part to the widespread credential practices in the society. Diplomas are regarded as almost the most important criteria for evaluating a person in every situation. Education is seen as a means to rise in socioeconomic status, rooted in the traditional official recruitment examination system.

3. Korean parents are generally obsessed with their children acquiring a college degree, particularly one from a prestigious colleges. In order to get their children admitted to a top-class college, parents put vigorous efforts into their children's academic achievement beginning when their children enter primary schools. They believe their children's future largely depends on the college degree and that prestigious colleges guarantee their children a successful life, as well as themselves: children's prestigious college degrees symbolize successful "parenting."

Conclusively, Korean people have passion for "achieving the happiness of the next generation" through acquiring higher education even though it may mean sacrificing themselves their whole life. For example, Korean people are pleased to sell their properties for the expenditure of their children's higher education such as tuition fees and boarding charges.

"Korean people have passion for 'achieving the happiness of the next generation' through acquiring higher education even though it may mean sacrificing themselves their whole life."

Wang-bok Kim

From this perspective, when we talk about educational contributions to economic development, we should not neglect cultural and social elements like the educational zeal so present in Korea.

Second, parents' concerns about and their participation in the children's education should be encouraged because education cannot be carried out successfully only by the school or by the child.

REPUBLIC OF SINGAPORE

PEOPLE

Population (1988): 2.6 million
Ethnic Groups: Chinese 76%, Malays 15%, Indians 7%, others 2%.
Languages: English, Mandarin and other Chinese dialects, Malay, Tamil.
Education: Years compulsory — none. Attendance — 94%. Literacy — 87.1%
Work Force (1.3 million): Industry — 58.1%; services — 33%; government — 8.1%.

EDUCATION

The government aims to provide at least 10 years of education per child. An official policy of bilingualism ensures that children are taught English and a mother tongue.

GOVERNMENT

Type: Parliamentary democracy.

ECONOMY

GDP (1988): $23.9 billion; Per-capita Income: $8,782.

An emphasis on high technology, high-value-added goods and services have made Singapore an electronics and regional banking center, as well as a center for transportation and communications.

REPUBLIC OF SINGAPORE: EDUCATION GOALS AND PRIORITIES FOR THE COMING DECADE

Lee Yock Suan
Minister for Education

Singapore is a small country. It has a total land area of 640 sq. km. and a population of 2.7 million. We have a multi-racial population comprising three main ethnic groups — Chinese, Malays and Indians. Singapore has no natural resources. However, we believe that human resourcefulness, more than the availability of natural resources, is the key factor in determining a country's growth and prosperity. Hence, we invest heavily in the education and training of our people.

Education Goals

There are two major goals that we have set out to achieve in education:

- First, the economic goal — which is to develop our human resources to meet the needs for an educated and skilled workforce.
- Second, the social goal — to develop our young intellectually, morally and physically.

Economic Goal

We provide equal educational opportunities for all, regardless of race, gender or social background. All children in Singapore have access to 10 or 11 years of general education — six years primary and four or five years secondary schooling.

Our education system caters to children of differing abilities and aptitudes, with streaming or tracking being an integral feature of our system. This provides slower pupils more years in school as well as a

more realistic curriculum which they can master. The system is also a permeable one, allowing pupils in the slower track to switch to the faster track should they develop potential for it.

At the other end of the ability spectrum, we provide special programs for the intellectually gifted and those talented in music, art and languages.

We believe that the 10 or 11 years of general education would provide a sound foundation for all pupils. This would stand them in good stead regardless of whether they choose to pursue an academic, professional or technical-vocational-biased course after that.

In due course, this would help upgrade the quality of our workforce, a critical factor in an increasingly competitive international economy.

Social Goals

Bilingualism in English and the mother tongue has always been, and will continue to remain, a cornerstone of our education system. This is supported by the teaching of civics and moral education.

In an open society like Singapore, it is imperative that our younger generation be anchored in a sound value system. This would serve as a reference point for them to make good value judgments in a society that is undergoing rapid transformation.

The learning of the English language has always been a priority. English is the common language among the different ethnic groups and provides the language medium for interaction among them. It has also enabled us to plug into modern science and technology and helped transform our economy.

We have also always emphasized the learning of our mother tongues. This has helped reinforce certain traditional values in our society — values such as honesty, diligence, respect for others, responsibility, family togetherness, society before self and so on. These are values which have held our society together and helped to move it forward. They are, therefore, values which we hold dear.

In this respect, the teaching of civics and moral education is aimed at helping our young to internalize these values. It will help shape their character, instill in them a sense of civic responsibility and create a common ethos among all Singaporeans, regardless of race, language or religion.

The intellectual and moral development of our children cannot be over-emphasized. However, it is equally important to ensure that our school children are also physically fit and remain so. The Ministry of education recently embarked on programs to promote and maintain a healthy lifestyle among schoolchildren. We have adopted a two-pronged approach — first, through building up awareness of good nutritional habits, and second, through a structured physical fitness program.

"I wish to reiterate our belief that education is the key to a better future and that we will continue to invest in education, so that we can prepare our people well to meet the challenges of the 21st century."

Lee Yock Suan

Education Priorities

There are four main priorities for education in the coming decade.

- First, in the area of *curriculum and assessment*. We would need to ensure that high standards are maintained and that they meet the needs of our society for the 21st century. Our curriculum must include the knowledge, skills and attitudes consistent with the development of our people within a global outlook. Curriculum review and development must be continuous.

- The second priority is in the area of *technical-vocational education*. We have in place an academic program and a well-established postsecondary technical-vocational education and training system. However, we need to continue to upgrade the latter to ensure that it remains responsive to the needs of our economy which is undergoing rapid changes. Related to this is the need to upgrade the level of education and technical skills of our existing workforce.

- Third, the *training of teachers*. Teachers are the standard bearers of our education system. It is they who translate our educational policies into practice and transmit the values which hold our society together. The ministry would not relent in its efforts to attract the best and most suitable people into the teaching service. We have already restructured our teacher training program in the last few years. We would continue to ensure that the best possible training — both preservice and inservice — is given to teachers.

- Finally, the widespread but judicial usage of *information technology* in our schools is a priority for the coming decade. This is in keeping with Singapore's larger plan of transforming itself into an intelligent island where schools and homes will be linked by computers. We are introducing computer systems in schools to enable both students and teachers to access international databases.

Conclusion

To conclude, I wish to reiterate our belief that education is the key to a better future and that we will continue to invest in education, so that we can prepare our people well to meet the challenges of the 21st century.

REPUBLIC OF SINGAPORE: POLICY OBJECTIVE FOR EDUCATION

The overall aim of education is to bring out the best in every pupil and develop in him sound moral values and a strong foundation in the basic skills necessary to meet the demands of a fast-changing world.

In particular, education seeks to:

1. Help pupils develop lively, inquiring minds, giving them the ability to question, discuss and argue rationally, and to apply themselves to tasks.

2. Help pupils use English effectively and imaginatively in listening, speaking, reading and writing, and, at the same time, acquire proficiency in the chosen mother-tongue.

3. Provide a basis of mathematical, scientific and technical knowledge, enabling pupils to learn the essential skills needed in a fast-changing world of work.

4. Help pupils develop into emotionally stable and physically fit adults, prepared for life's realities.

5. Instill moral values and respect for other people, races, religions and ways of life.

6. Help pupils appreciate how the nation earns and maintains its standard of living and to esteem the essential role of defense, industry and commerce.

7. Help pupils understand the world in which we live and the interdependence of nations.

8. Teach pupils about human achievement and aspirations in the arts and sciences, in religion, and in the search for a more just social order.

9. Encourage and foster the development of pupils whose capacity to learn is impaired by social or environmental disadvantages, by making additional resources available to them, if necessary.

UNITED STATES

"ONE THING LEADS TO ANOTHER"

Richard W. Riley
U.S. Secretary of Education

I first want to recognize the good work of Frank Newman and the ECS for working so hard to make this conference a success. I have known Frank for a great many years. He is a creative and spirited individual, full of ideas and unique insights about education. From my own firsthand experience, I know that ECS meetings are fertile ground for creativity, for the exchange of ideas between countries and individual states represented here today.

All of us are keenly aware that the world's economy is changing in very dramatic ways. At times, we seem to be hurtling toward the future. Our language is full of new words and phrases — "global village," "East/West dialogue" and "multiculturalism," for example — which suggest that a new outlook is taking shape as to how we see ourselves in the world.

The issues that demand our attention as educators are no longer the sole concern of foreign policy experts — immigration, the creation of a global information highway, the movement of refugees, the nexus between economic policy and education reform in school-to-work initiatives, the necessity of lifelong learning as a new form of basic security as jobs shift and markets change rapidly.

Learning to live together is something that increasingly has immediate consequences in the local school playground. There are, for example, schools all across America — from Los Angeles, to Miami, to New York City, Arlington, Virginia, and Washington D.C., to name but a few — where teachers are grappling with the task of how to educate children from 30 or 40 different nations and cultures — sometimes all in one class.

I do not think it an understatement to suggest that we live in one of the great periods of transition between the ages. The Industrial Age is passing, the Information Age is arriving with a rush and in some places faster than in others. The task of easing the way and preparing people for this historic change is, to my mind, one of our central missions as educators in these last, waning years of the 20th century.

This is not an easy thing to do. Education in many of our societies, including America's, is also seen as a piece of tradition. Change comes slowly. Education is the area where the cultural heritage of a nation, a people's sense of citizenship, other than being a World Cup fan every four years, is passed down from one generation to another.

"Education reformers can only go forward if we are keenly sensitive and tuned in to people's sense of unease, uncertainty and even fear of change."
Richard W. Riley

So there is a very real tension between the need for change — giving our young people the skills to find their place in our modern, information-driven world — and the desire for many people to feel rooted and secure as the world changes around them. Here, a story may be in order.

A week ago, a dear friend of mine — a writer — called me to talk about his life. As we talked, he explained how happy he was to be married again, a change that added a new dimension to his life. After a pause in our conversation, this very thoughtful writer — a very wise man — said that he had come to a profound conclusion about life.

I waited with some anticipation. "Dick," he said: I waited. "One thing leads to another." I want to tell you that a bolt of lightning did not hit me when he made that statement. But the more I pondered, the more I decided that there was a nugget of wisdom in my friend's conclusion that we all need to take to heart. For it is my very strong belief that in this era of change, education reformers can only go forward if we are keenly sensitive and tuned in to people's sense of unease, uncertainty and even fear of change.

The American people — and possibly many other people in the Asia-Pacific Rim — are living with an enormous amount of uncertainty in their lives. Family life is unstable. People are being uprooted or forced to move to find work. Traditions that have given people meaning and order are suddenly questioned, discarded or overturned.

"Preparing people for historic change is one of our central missions as educators in these waning years of the 20th Century."
Richard W. Riley

The very pace of life itself gives many people a growing sense of disconnection, the uneasy feeling that even though all of our young people may be watching global MTV, the world is not spinning right.

Here, we hear the echo of the question first asked by the American philosopher Henry James many years ago, when he pondered how humanity would adapt to the "velocity of change." It is, in many ways, the central question of our time.

This sense of unease and skepticism is more rooted in our societies than we may think. It is not just the unease of the elderly. This "show me" attitude, this sense of caution, is very much the mood of the country, the spirit in which our efforts to raise standards and improve schools will be received. In a time when so much is unknown, when so many factors in life are up in the air, parents will take a hard look — and then another hard look — at any proposal to change the education of their children.

So when it comes to education reform, to doing the real work at the state, community, college and school levels of achieving the national education goals embodied in the Goals 2000 Act, it may be wise to recognize the wisdom of my old friend — that one thing leads to another. People need to be brought along one step at a time.

The American people are not averse to change in education. Goals 2000 is the culmination of their desire for better, safer and more disciplined schooling. The goals, as we all know, have a clear focus. They speak to a need for order and a desire for excellence. In addition, the Goals 2000 Act is a historic act that carefully lays out a better and more balanced role for the federal government in the process of making our schools stronger.

"Goals 2000 is the culmination of their [Americans] desire for better, safer and more disciplined schooling."
Richard W. Riley

So, this is truly a moment of satisfaction for many of us who have made education reform our continuing concern. We have done 10 years of good work and all of your efforts need to be acknowledged.

But, before we go forward, we need to be mindful and tune into how the American people are thinking here in 1994. We need to respect the fact that they may be skeptical and distrustful of any change they do not understand, that they will be wary of any reform that has a top-down ring to it. We need to be responsive to their deeply felt concerns about safety and discipline, that we share their desire for schools to be "havens of order" in a world which is increasingly uncertain, confusing and dangerous for their children.

We will make very little progress if parents come to the conclusion that our reform efforts have little if anything to do with their immediate concerns. Can their child go to the bathroom safely during the school day? Will their children learn basic American values and their fundamentals? Are we giving their children the practical skills they need to cope in a rapidly changing world?

We need to reassure parents that our ideas for improving schools start with hard work, honesty, responsibility and safe schools. That we want excellence, high standards, parent participation in the process of learning and — above all — an end to the era of low expectations.

There is nothing conservative or liberal about making our schools havens of order and learning. When Bill Bennett was U.S. secretary of education, he applauded my effort in South Carolina to improve basic skill performance, student attendance and greater student enrollment in difficult and advanced courses. And now that I am secretary of education, I have no problem agreeing with him when he suggests that schools need to emphasize the fundamentals, build character and create a sense of citizenship among our young people.

"There is nothing conservative or liberal about making our schools havens of order and learning."
Richard W. Riley

At the same time, I will do all I can to oppose those on the political fringe who believe the only way to improve public education is to destroy it. Those on the extreme who are single-minded and down-right pessimistic; who belly-ache up a storm but never ever do the hard work of bringing people together.

I will always reach out to concerned parents and religious-minded families who may be skeptical about public education. I want to assure them, to say there is a place in the classroom for your children and a need to have families truly connected to the process of learning.

But nothing will be gained if a great American institution like public education, the bedrock of our free enterprise system and democratic rights, is singled out and made an object of public ridicule or the "Bosnia" of competing factions. If you divide a community, children's learning inevitably suffers.

Those on the fringe may never be willing to listen to us with an open ear. But we can gain the support of the great solid middle of the American public if we tune in to their deeply felt concerns about order and safety and make them full partners in the Goals 2000 process.

The message from those states that are now struggling to make reform happen, or that have been set back in their attempts to improve education, is quite clear: if average folk — if parents and teachers — are not included from the very start of the process, if every interest is not brought in early and made true partners in a shared process, then there is little chance of reform going forward.

This is why we placed such a strong emphasis on a voluntary, truly bottom-up reform process. This planning year, and funds provided by Goals 2000, is a grand opportunity for you in each of your states to begin the process of reaching out to engage the public in a real dialogue for reform.

Please take advantage of the flexibility we have built into this process. Recognize that the old world view of categorical grant thinking is just the wrong way to think about Goals 2000. There are no new regulations, the application process is short, we will think with you rather than against you. The national goals are a model not a requirement. A waiver process is already in place.

Above all, I cannot emphasize enough the need for you to truly engage the people of your states in this process as you begin to craft your own comprehensive action plans. Polling data, focus groups, toll-free hotlines, seminars and town meetings can be used to give your citizens a chance to be involved in identifying needs in your schools and proposing solutions that they would support. You may be surprised by the results.

In South Carolina, we used all of these means and found two strategies particularly effective. One included inviting prominent state and community leaders to go to schools, to see first-hand what the needs were and to discuss these needs and goals with parents, teachers, students and educators. A second powerful strategy was to partner up with parents and parent-education-business groups to sponsor evening regional forums where thousands of people would have a chance in small groups to come and propose goals for education, to offer specific suggestions, to reassure themselves that their interests were fully represented.

I know Colorado Governor Roy Romer (1994-95 ECS chairman) has been involved in other types of exciting outreach strategies as has Vermont's State Superintendent of Education Rick Mills and many others of you. We need to learn from each other. The only way you can develop that solid middle base of public support that will sustain reform against those on the fringe is to go to the people of your state. Give them something to work with.

As I have said many times before, there is no one formula for success. Each community and state must find the connections that respond to its unique complexity, changing demographics, history and needs of all of its children.

In the next 10 years, this country will have to educate an additional seven million children — more children than we have educated since the 1970s. These children, by and large, will not be your typical suburban child. They will be largely minority and many will be new immigrants. So our task is immense.

But 10 years of effort has gotten us to this day. Goals 2000 is the law of the land, a north star for excellence and high achievement. If we tune in and bring the American people along — if we are sensitive to their desire to make schools havens of order and learning for their children — and include them in the process — then "one thing will lead to another" — the American people will rally to our cause.

We can build better schools and stronger communities. We can give every child a world-class education. And we can give all of our people the sure grounding they need to live in this exciting time of expansion and learning, where many people from many nations and cultures are learning to become one.

UNITED STATES: GOALS 2000 FACT SHEET AND BASIC COMPONENTS OF THE BILL

Overview

- Goals 2000 provides resources to states and communities to develop and implement comprehensive education reforms aimed at helping all students reach high academic and occupational skill standards.

Legislative Overview

- On March 23, 1994, the House of Representatives approved the final Goals 2000 bill with a bipartisan vote of 306-121. On March 26, the Senate approved Goals 2000 with a 63-22 bipartisan vote.
- President Clinton signed the bill on March 31, 1994.

Timetable and Funding

- Congress has appropriated $105 million for Goals 2000 for fiscal year 1994. First-year funds became available to the states on July 1, 1994. The president has requested $700 million in his 1995 budget proposal to be administered by the Department of Education and $12 million for the Department of Labor to support the National Skill Standards Board.

BASIC COMPONENTS OF THE "GOALS 2000: EDUCATE AMERICA ACT"

National Education Goals (Title I)

- Codifies the original six National Education Goals concerning school readiness, school completion, student academic achievement, leadership in math and science, adult literacy, and safe and drug-free schools and adds two new goals related to parental participation and professional development.

National Education Reform Leadership. Standards and Assessments (Title II)

- Establishes in law the National Education Goals Panel which will build public support for the goals, report on the nation's progress toward meeting the goals and review the voluntary national content, student performance, voluntary learning standards and the criteria for certification of these standards.

GOALS 2000: COORDINATION WITH OTHER EDUCATION PROGRAMS

- Goals 2000 is the first step toward making the federal government a supportive partner in state and local systemic reforms aimed at helping all children reach higher standards.

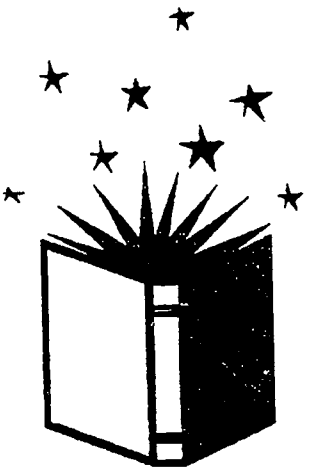
- Other new and existing education and training programs will fit within the Goals 2000 framework of challenging academic and occupational standards, systemic reform and flexibility at the state and local levels. The aim is to promote greater coherence among federal programs, as well as between federal programs and state and local education reforms.

- For example, the School-to-Work Opportunities Act will support state and local efforts to build a school-to-work transition system that will help youth acquire the knowledge, skills, abilities and labor-market information they need to make a smooth transition from school to career-oriented work and to further education and training.

- Similarly, the administration's proposed reauthorization of the Elementary and Secondary Education Act (ESEA) allows states that have developed standards and assessments under Goals 2000 to use them for ESEA, thereby providing a single set of standards and assessments for states to use for both their reform needs and to meet federal requirements.

- State participation in all aspects of Goals 2000 is voluntary and is not a precondition for participation in other federal programs.

May 11, 1994



GOALS 2000

A World-Class Education for Every Child

Why do our children need high standards?

When you get on an airplane, you want a pilot who has been held to the highest standards of flight training. When you need an operation, you want a surgeon who has been held to the highest standard of medical education. And when you root for American athletes in the Olympics, you know they won't win the gold unless they have trained to meet the highest standards of international competition.

In many areas of our life, we expect — and demand — high standards. We know their great value. They help bring out the best in us.

When we do not hold all students to high academic standards, the result can be low achievement and the tragedy of children leaving school without ever having been challenged to fulfill their potential.

But a historic change is now taking place in American education: the development of voluntary national standards that will clearly identify what all students should know and be able to do to live and work in the 21st century. These standards will be designed to be internationally competitive.

The movement to develop voluntary national standards has already begun. The National Council of Teachers of Mathematics has prepared mathematics standards, and the U.S. Department of Education is funding the creation of voluntary national standards in the arts, civics and government, economics, English, foreign languages, geography, history and science.

What are these standards?

Content standards define what all students should know and be able to do. They describe the knowledge, skills and understanding that students should have in order to attain high levels of competency in challenging subject matter.

Performance standards identify the levels of achievement in the subject matter set out in the content standards. They state how well students demonstrate their competency in a subject.

The standards will be voluntary, not mandatory. They will stand or fall depending on whether they are accepted by teachers, administrators, parents and the public. No federal mandate will impose the new standards. States may use these standards as models in developing their own content and performance standards.

How will high standards make education better?

Establishing high standards lets everyone in the education system know what to aim for. They allow every student, every parent and every teacher to share in common expectations of what students should know and be able to accomplish. Students will learn more when more is expected of them, in school and at home. And standards will help create coherence in educational practices by aligning teacher education, instructional materials and assessment practices.

Why does American education need voluntary national standards?

American education has never had national standards. When no one agrees on what students should learn, each part of the education system pursues different, and sometimes contradictory, aims.

The new improvement of American education begins with an agreement about *what students should learn* — a set of voluntary national benchmarks that states may use as guidance in developing their own content and performance standards. But this will NOT be a national curriculum.

Meaningful voluntary national standards will help state officials, local educators, teachers, parents and others to establish challenging standards for students to ensure that the education system will focus on providing the opportunity for all students to learn to high levels. This can lead to:

- Textbooks that will emphasize student understanding
- Student assessments that will test whether students understand and can use at high levels the knowledge and skills in the content standards
- Instructional programs and methods that will emphasize not only the basics but also reasoning and problem solving
- Teacher education and professional development that will prepare educators to teach to challenging standards
- New technologies that will increase learning to meet high standards geared to internationally competitive levels of performance.

How did the movement for national standards begin?

In 1989, President Bush and the nation's governors, with leadership from then-Governor Bill Clinton, met in Charlottesville, Virginia. They agreed that the nation must set ambitious education goals. These bipartisan National Education Goals are the basis of the recently passed Goals 2000: Educate America Act, President Clinton's landmark education initiative.

The goals included a pledge that by the year 2000, all American students would demonstrate competency in challenging subject matter. To provide direction, the congressionally established,

bipartisan National Council on Education Standards and Testing recommended the development of voluntary education standards that would provide the needed focus for state and local efforts.

How are voluntary national standards being developed?

The U.S. Department of Education, other federal agencies and foundations have made grants to major professional and scholarly organizations to develop voluntary national standards in different subjects. Each standards-setting project includes a broad range of people in the process. Thousands of teachers, scholars, administrators, parents and other members of the public are participating in shaping the national standards. These standards will undergo extensive review to affirm their national status, including possible certification by the National Education Standards and Improvement Council established in the Goals 2000: Educate America Act. Certification will indicate that the standards are challenging, consistent with the best knowledge about teaching and learning and have been developed with broad input from educators and others.

What is the role of the states?

A number of states have begun to develop or are revising their own state content standards (sometimes known as state curriculum frameworks). Using the expertise of classroom teachers, parents, scholars, public and private school administrators, elected officials, businesses and the community at large in advisory groups, the states are defining content standards to meet their own needs. These state standards will act as blueprints for local schools, districts and others to develop the classroom materials and lessons for a single subject or combination of subjects. They will also establish guidelines for effective teacher preparation, professional development and certification.

In addition, the new Goals 2000: Educate America Act will provide funds to the states to develop their own state improvement and implementation plans that will include content and performance standards and valid assessments aligned with the standards. The setting of state standards can be informed by the voluntary national standards. The state plans will also include voluntary standards or strategies to ensure that all students have a fair opportunity to achieve the knowledge and skills described in the state content and performance standards.

Example of a Draft U.S. History Standard

By high school graduation, students should be able to demonstrate understanding of how the roots of representative government and political rights were defined during the colonization period by:

- **Comparing how early colonies were established and governed**
- **Analyzing fundamental principles of representative government in the colonies**
- **Explaining the development of representative government in the newly established colonies**
- **Analyzing how political rights were affected by gender, property ownership, religion and legal status.**

How can you learn more about the national standards project?

You can order a copy of the math standards developed by the National Council of Teachers of Mathematics and the arts standards developed by a U.S. Department of Education-funded consortium of arts organizations. Write the department-funded groups working on standards in other subjects if you would like to participate as a reviewer of drafts or review those that are complete. You can contact them at the following locations:

Mathematics

To order *Curriculum and Evaluation Standards for School Mathematics* (Item number: 398E1, ISBN 0-87353-273-2, $25 each — discounts for bulk orders), write:

The National Council of Teachers of Mathematics Order Processing
1906 Association Drive
Reston, VA 22091

Arts

Released March 1994. To order *National Standards for Arts Education: What Every Young American Should Know and Be Able to Do in the Arts* (Item number: 16705, cost $15), write:

Music Educators National Conference Publications Sales
1806 Robert Fulton Drive
Reston, VA 22091

Developed in coordination with the American Alliance for Theatre and Education, the National Art Education Association and the National Dance Association.

Contact Peggy Senko. Development also supported by the National Endowment for the Arts and the National Endowment for the Humanities.

Civics and Government

Center for Civic Education
5146 Douglas Fir Road
Calabasas, CA 91302-1467

Contact: Charles Quigley
Completion: Fall 1994.
Also supported by the Pew Charitable Trusts

Geography

National Council for Geographic Education
Geography Standards Project
1600 M St. NW
Washington, DC 20036

In coordination with the Association of American Geographers, the National Geographic Society and the American Geographical Society

Contact: Anthony DeSouza
Completion: Fall 1994
Also supported by the National Endowment for the Humanities

History

National Center for History in the Schools at UCLA
231 Moore Hall, 405 Hilgard Avenue
Los Angeles, CA 90024

Contact Charlotte Crabtree
Completion: Winter 1994
Also supported by the National Endowment for the Humanities

Science

National Academy of Sciences
National Research Council
2101 Constitution Avenue NW
Washington, DC 20418

Contact: Angelo Collins
Completion: Winter 1994
Also supported by the National Science Foundation

Foreign Languages

American Council on the Teaching of Foreign Languages, Inc.
6 Executive Plaza
Yonkers, NY 10701-6801

In collaboration with the American Association of Teachers of French, American Association of Teachers of German and American Association of Teachers of Spanish and Portuguese

Contact: Jamie Draper
Completion: Winter 1995
Also supported by the National Endowment for the Humanities

U.S. Department of Education

For general information about content standards development, contact:

Office of Educational Research and Improvement/FIRST Office
U.S. Department of Education
555 New Jersey Avenue NW
Washington, DC 20208-5524

Taken from *High Standards for All Students*, U.S. Department of Education, June 1994

RESOURCES

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Meguro-ku
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Washington, DC 20202
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fx: 202-708-9814

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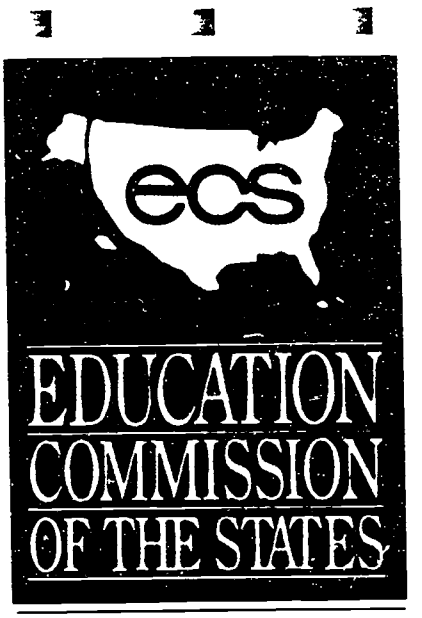

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